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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b> <b>C12N 15/12, 5/10, C07K 14/47,</b> <b>C12Q 1/68, A61K 38/17</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 98/45435</b> <b>(43) International Publication Date:</b> 15 October 1998 (15.10.98)
<b>(21) International Application Number:</b> PCT/US98/06954 <b>(22) International Filing Date:</b> 10 April 1998 (10.04.98)  <b>(30) Priority Data:</b> 08/835,913 10 April 1997 (10.04.97) US  <b>(71) Applicant:</b> GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US).  <b>(72) Inventors:</b> JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US).  <b>(74) Agent:</b> SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>  <b>(88) Date of publication of the international search report:</b> 12 November 1998 (12.11.98)
<b>(54) Title:</b> SECRETED EXPRESSED SEQUENCE TAGS (sESTs)  <b>(57) Abstract</b>  Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.		

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AGGCCATCTC	GGCCGCC	TGGCGCCCAT	CGTGGCTAAA	CAGGTATGTC	TGGGCCGGAA	120
GGTGTGGTC	GTACGCTGTG	AAGGCATCAA	CATTTCTGGC	AATTTCTACA	GAAACAAGTT	180
GAAGTACCTG	GCTTTCCTCC	GCAAGCGGAT	GAACACCAAC	CCTTCCCGAG	CCCCCTACCA	240
CTTCCGGGCC	CCCAGCCGCA	TCTTCTGGCG	GACCGTGCGA	GGTATGCTGC	CCCACAAAAC	300
CAAGCGAGGC	CAGGCCGCTC	TGGACCGTCT	CAAGGTGTTT	GACGGCATCC	CACCACCCTA	360
CGACAAGAAA	AAGCGGATGG	TGGTTCCTGC	TGCCCTCAAG	GTCGTGCGTC	TGAAGCCTAC	420
AAGAAAGTTT	GCCTATCTGG	GGCGCTGGC	TCACGAGGTT	GGCTGGAAGT	ACCAGGCAGT	480
GACAGCCACC	CTGGAGGAGA	AGAGGAAAGA	GAGAGCCACT	CGAG		524

## (2) INFORMATION FOR SEQ ID NO:1220:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

GAATTCGGC	CTTCATGGCC	TATGATAAGT	TCATTCTGGC	TGGAGTATGG	TGGAGAGCCA	60
TGGAGTACTG	GTAGGTGAGG	GGCTGGAGGA	GGGATAGGTT	GGAGATGTTG	AGAAAGGCTT	120
TAAAGATCGT	GGTGAGTTGT	TTGGGTTTGT	GTTGGCTGTG	AGGAGTCATC	AGAGGTTTTA	180
ATGCAGGAAA	GTGGTTTGTA	CTCTATACTC	CAGCAGCAGA	GGTTGGTTGA	GTGGTGCTCA	240
AACTTTGTG	TGTATTGGAA	TCATCTGAAG	AGCTTATAAA	AATACCAGTA	CCCAGGCTAC	300
AAACAGTAAA	ATCAGATTTT	CTGAAGGAGA	GGCCCAGATA	TTGGATTTTT	GATAATTTCC	360
CAGGTGATTC	CAGTGCGTAT	CTGAGTTTGA	GAACTACTCT	TTTAGAGGGG	TCTGATGGAG	420
TAAGGAATTC	AGAGGCCACT	CGAG				444

## (2) INFORMATION FOR SEQ ID NO:1221:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

GCTTGAACAA	CACAGGTTTG	AACGTGTCAG	GTCCACTTAT	CCATGAGTAT	TTTCAACCAA	60
ACTAGTATCA	AATATACAGT	ATACGCGGGA	CTTGAAACCC	ACGTGTAAGG	AGGACGGAAGT	120
TTTCGTGTA	GTCAGCTCCG	AAGCACTGAC	TTTGGGACTT	GAATTTGCAC	AGATTTTGAT	180
ATGAAGTGGG	GAAGGGGGTA	ACTTGGTACA	AATCCCCTGC	ATATACTGTG	GGATGACTCT	240
AGTTTGATT	CATGAGTGATA	TATGGAAGAC	ATAATTCTTC	CCATAAAAAA	TCATAATCTT	300
GGTAGTCTAT	CATAGTCTAG	CATTAAGAGC	ATGAACTTTG	GAGCCGTCCT	CGAG	354

## (2) INFORMATION FOR SEQ ID NO:1222:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

GAATTCGGCC	TTCATGGCCT	AGCTAGTTCA	TGCTTGCGTT	GAAAGAGTGG	TCGTTTGCGC	60
TGGGTCATCA	CTGTGTAGTA	TTGGGGATAC	TTAGGTGAGA	AAAAAACTTA	ACGCTAGAGA	120
CGTTCACGCA	CTAGTGGAGA	AGCCAGGATT	GTTGCCCTAG	AGTTACAGTA	GATAAAAGTA	180
CCTCAGAGAA	CTGCGGGGGC	TCCCAACCTG	GACGCTTGCA	CCGGAGTATT	AAATCCAGCT	240
AGAGAATGGC	ATGTGCAAAG	ATACAGAGCT	TTTAGAAGTT	GCCTGCATTC	CTTGCCCCCA	300
TCCTCACTCG	AG					312

## (2) INFORMATION FOR SEQ ID NO:1223:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 371 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

GAATTCGGCC	TTCATGGCCT	AATAAAAACT	GGCTGGGCGT	GGTGGCGGCA	CCTGTAATTG	60
CAGCTATTTG	AGAGGCTGAG	CCAGGAGAAT	CGCTTGAACC	TGGGAGATGG	GGGTTGCAGT	120
GAGCCGAGAC	CGCCCCATCG	CACTCCAGCC	TGGGCAACAA	TAGTGAAACT	CCGTCTCAAA	180
AAGAAAAAAA	GTTTCCTTAG	AATGGAAAT	ATTCATTAT	GAGCTCTTTT	GGCAATCCGT	240
CATCAGTATA	TTCTGAAAAC	CAATAAGATG	TGCCCAAGTT	GGGGGCGAGA	GCTATGTAAT	300
GCAAGGCATA	TGCTGATGA	AGTATACAAA	TACACCTGAC	CAGAACTTTT	GTCTCCCAAA	360
TAAGTCTCGA	G					371

## (2) INFORMATION FOR SEQ ID NO:1224:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 404 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

GAATTCGGGC	TTCATGGNCT	AAAGAAAAGT	GCTGTAAATG	AGGATGTGGC	TTGCTGGGCA	60
ATAATCATTG	TAGAGTGGTA	CACCCAGTGC	CTTCACAGGA	TGCTTGAATA	CTGCCTGCAA	120
GCCTCGTGTC	ATTAGCCCAG	TAGGCATATG	ATAAGCCTCT	GGTCATCATT	TCCACTGTTA	180
AGAGTTAGTG	TCAGATATGG	AGCACCAATA	GGCTTGTAAG	TGAGAGCATC	CCTCAAAGTT	240
GTCACTTAG	GAGACTCTGA	TGACCATGAT	GCTGCCATTG	TCCAAATGTG	CACTCATCTG	300
TCTTTTGGGG	AGTGATTCCC	GACAATTAT	AGATTACAAG	AGAAAAGCAG	TCTGTATTTT	360
CATCAAATGA	TAGTTTAAAT	GGAAAATGAA	TCAGAAGTCT	CGAG		404

## (2) INFORMATION FOR SEQ ID NO:1225:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 395 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

GAATTCGGCC	TTTCATGGCCT	AGTTGGGGTT	AATTATGGCA	CCTAATTAT	AGAAGAGGAA	60
ACCAATTTAG	AGACATTAAA	ATACTTGTTC	AAGGTTACAC	GGCAGGGAAA	AGGCAGAGTC	120
AGGATCTGTA	TTCTGTAGTC	TGAATCCAAA	GCGAATCCAA	AACCTCTGAGG	TGCTNTGCTC	180
TGCTACCTGC	TGATGGTTCT	GCTGGGGGAT	GCTCAACCAC	CAGATGTCTT	ACTTGGGAAC	240
TGCACTGGAG	GTCGAGGGTC	TGCATTCTCC	TTCTGTCTGA	AAATCACAAC	GTCCCCATCT	300
TTCAAGCCAT	AAGAAGCCAA	TGATCTGTGG	TTGTCTGTGA	GAGGTCTTTC	CGCATAGACG	360
ATCTGGCTCT	CGGCTGCGGG	GATGCCAGAC	TCGAG			395

## (2) INFORMATION FOR SEQ ID NO:1226:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

TCAAAGGTCC	TTTTGTGGAA	GCGGAGGTGC	CCGATGTTGA	TCTGGAGTGT	CCTGATGCAA	60
AGTTGAAAGG	GCCCAAGTTT	AAGATGCCTG	AGATGCACTT	CAAGGCCCCC	AAGATCTCCA	120
TGCCTGATGT	GGACTTACAC	CTGAAAGGCC	CCAAAGTCAA	AGGGGATGCG	GATGTGTCGG	180
TGCCAAAATT	GGAGGGAGAT	TTAACAGGCC	CCAGTGTGGG	TGTGGAGGTG	CCTGATGTTG	240
AGCTGGAGTG	TCCTGATGCA	AAGTTGAAAG	GCCCTTGTCT	CGAG		284

## (2) INFORMATION FOR SEQ ID NO:1227:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 718 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

GAATTCGGCC	TTTCATGGCCT	AAGCAGACGG	GCAGTAGGTC	CCAGAGTTAT	ACTTCGGAGC	60
ACATGTTCAA	GAGGGAAATG	ACGACCGGCC	CCCACGGTCC	TGGGATGCAG	GTGTGAGGAC	120
TGAGAATGCT	GGACGGGGTG	TGGTCGAGGC	ATGGTCAGGG	TGGCCCCGAG	CTGTGCCCA	180
CCCCAGGGAT	GCAGCAAGGG	TGCTCTGTGC	AGGACCCCGA	ACTTGGGCTC	TGCCCCATTT	240
CAGTGTCTGT	TGCATGTCAC	GCTGGCATCT	TCGGCATGTC	CACAGTTTGT	CACCCCCCAT	300
TTGGAGAAGC	TGCAGCGGAA	GATGGTTTCC	TCTGTGCCTT	GCAGGCAACG	TCATCCATCC	360
AGATCCTCCC	AGTGCCTTGC	CCGAATCGAN	CTGTGCGGTA	CACTCCTCCA	NACCCGCGAA	420
GCCGAGCATG	CGGCACACCA	CGTCTCCGTC	CTTCTTGTCC	CAGCCGTCGT	CACACACAGT	480
GCCCCAGCGC	CGGTCTGGT	ACACTTCCAC	GCGGCCCTCG	TGCGGACCTG	AGCCATTAC	540
CAGGCGGATC	ATCATCGGGG	CCTCCAGGCC	ACTGGCATCC	CCAGCTCTGT	CTCCTTTCTC	600
TCCTTTCTCT	CCTTTTGGGC	CTCGGTCACC	TAAAACAGAG	GAGGAAACTG	GCATTAGAAA	660
TGGAAAGAAA	TCCTAATTGT	GAATAAAATA	TTACCTGCAG	GAGATTGATG	AACTCGAG	718

## (2) INFORMATION FOR SEQ ID NO:1228:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 389 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

GAATTCGGCC	TTCATGGCCT	AGCTGGGTTG	ACCCTGCAGA	GCCAGAGAG	CCGAGGGGCC	60
ATGTGTGCTG	GCATGGGGCT	CCCTGCCCCT	TTCTGAGGCT	CAGCACGGAG	GGGAGAAACC	120
CACATTTTCA	GAGGGAACCA	GCAGCAGAGC	AGAACCAGTA	ACCAAGATCC	CGGCAACCCC	180
TTGTGCTGAC	CCCACACACG	CTTCCCCTCT	TCCTGGCCAG	GCCACTCCAA	AGCTCTGTGC	240
ACACAGACAA	TAGACATCAG	GACTTTCATC	TTCACTCGTC	ATCTGGCAGC	AGAGAGCCTG	300
CAGGGCTGGG	CTGCAGGGAG	AAGAGTTCCT	TTCTCAGCG	ATCCAGGCAA	GGGGAGAGCA	360
GCTCTGTGCC	TGCCACTGGC	CCACTCGAG				389

(2) INFORMATION FOR SEQ ID NO:1229:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

GAATTCGGCC	TTCATGGCCT	ACACAAACAT	GATTTTATTT	TATTATTTTA	TTTATTTTTT	60
TTATTTTATT	TTGAGATGGA	GTCTCGCTCT	ATCGCCCAGG	CTGGAGTGTA	GTGGCATGAT	120
CTCGGCTCAC	TGCAAGCTCC	GCCTCCTGAG	GCGGGAGAAT	TCCTTGGGCG	TGGGAGGCGG	180
AGGTTGCGGT	GAGCTGAGAT	TGCCCCATTG	CACTCCAGCC	GAGGCAACAA	GAGCGAAACT	240
CCTTCTCAAA	AACAAACAAA	CAACAACAA	CAACAACAAA	ACTCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:1230:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 600 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

GAATTCGGCC	TTCATGGCCT	AATGTGTTTT	ATGAACGATA	GATCACATCA	GAATCCTGT	60
GGGAGAGAAA	CCTTATAAAT	TAAACACATG	GCCCCCTTAG	AGACCACAGG	TGATGTCTGT	120
CTCCATCCTT	CCCTCTCCTT	TTCTGTCACC	TTTCCCCCTA	GCTGGCTCCT	TTGGACCTAC	180
CCCTGTCCTT	GCTGACTTGT	GTTGCATTGT	ATTCCAAACG	TGTTTACAGG	TTCTCTTAAG	240
CAATGTTGTA	TTTGCAAGCT	TTTCTGAATA	CCAAATCTGC	TTTTTGTAAG	GCGTAAAAAC	300
ATCACAAAGT	AGGTCATTCC	ATCACCACCC	TTGTCTCTCT	ACACATTTTG	CCTTTGGGGA	360
TCTGGTTGGG	GTTTTGGGTT	TTTTGTTGTT	GTTGTTTATT	TGTTATTTTA	AAGGTAAATT	420
GCACTTTTAA	AAAAATAATT	GTTTGACTTA	ATATATTGTC	TTTTTTTCTC	ACCTGCACTT	480
AGAGGAAATT	TGAACAAGTT	GGAAAAAAAC	AATTTTTGTT	TCAATTCTAA	GAAACACTTG	540
CAGCTCTAGT	ATCACTTGA	GTCTTCCTGT	TTTTCTGTGA	CCGGGTTATC	CTGCCTCGAG	600

(2) INFORMATION FOR SEQ ID NO:1231:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 420 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

```

GAATTCGGCC TTCATGGCCT AGGAGGGCCA CATCTGCCAN AGCCTGGAGT CTGCGAAGGC      60
CGGGACCCGG TTCCCGGGCC CACAGTGGGG GTGTGCAAAC CCGAGAGAAC TGGGTTGCAA      120
ATTCGTGAAG AATCAGCATC ATGTTTGGCA GCTGAGTATT GGAGCCAGGA GCCTGCCATG      180
AGGTTTGTAG AACAGAGTGC TGTTTTAGAG CTGGCAGCAG CATCTCAGCC CAAGAGAAGG      240
TTATATTCCC AGAGGATGTC AGTCCCAAGG ACCAGTAGCT GCCATCAGTT TGGATTCTGA      300
AAACTAACTG GCATCAACAC TGGGTGTAGA AACATGCTTG CTTATGTAT CAGAGGACAT      360
GCTCAGCAGA TCCAAGAGAT ATATTGGCA ACTTTTCTA GAAAAGGCAC CTGCCTCGAG      420

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(2) INFORMATION FOR SEQ ID NO:1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 602 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

```

GAATTCGGCC TTCATGGCCT ACCACCCGCG ACAGTTTCCC AGCAGGGCTC ACAGCAGCGT      60
TCCGCGTCAT GGGGATTTGG CAGCGTCTGC TGCTTTTGGG TGGGGTGTGC CTCCGGGCTG      120
GTGGCGGGGC CACTGCCCCG CTTGGGGGAA GCCGAGCGAT GGTTTGTGGG CGCCAGTTGT      180
CTGGCGCCGG GAGTGAGACC CTAAAACAAA GAAGAACACA AATCATGTCC CGAGGACTTC      240
CAAAGCAGAA ACCGATAGAA GGTGTTAAAC AAGTTATAGT TGTGGCTTCT GGAAAGGGTG      300
GAGTCGGAAT ATCTACTACA GCAGTGAATC TTGCACTTGC ACTAGCAGCG AACGATTCGT      360
CCAAGGCCAT TGGTTTGCTA GATGTGGATG TGTATGGACC TTCAGTTCCA AAGATGATGA      420
ATCTGAAAGG AAATCCGGAA TTATCACAGA GCAACCTAAT GAGGCCTCTC TTGAATTATG      480
GTATTGCTTG TATGTCTATG GGCTTTCTGG TTGAAGAAAG TGAACAGTA GTTTGGAGAG      540
GCCTTATGGT AATGTCGGCC ATTGAGAAAT TGTGAGGCA GGTAGATTGG GGTCCACTCG      600
AG                                          602

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(2) INFORMATION FOR SEQ ID NO:1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

```

GAATTCGGCC TTCATGGCCT ACTANACCTG CCTCGTAGTC CAGAAAGATC CCCACGCGCC      60
TGGGTGGGTC CCGGAGTGGA GCCAAGGCCG GTTCCGAGGA NTTGTAATAG CTCCCCAGGA      120
AGACCAGGAT CCAGAAGCCG TTGCCCGCGN ANAGCTCGCC CTTCTCCTTC CTGTTCAAGT      180
TCTCCCTGCA CACCCCCAGG GCCCAGCTGG TCGGGTCCCC AACCTCCACC TCCCAGTAGT      240
GGCGGCTGAG GTGAAGCGCT CCTGGCCAG CACGAGGGG CCGGGGTCAA AGCGCTCTGG      300
GCTGTCCGGC ANGGCCTGCC GTANGTCCCC CCGCTGCACG CGTCCGCCTG TCTTCAGACA      360
GGATCAGCTC AGGGTTGGCG GTGTCCGGGT CCAAGGTCAC GTCCCTCGA AACCTCCGCA      420
GTGTTTNTAC CAGTCCCGGG ACCCTGCACA CGGTCTCTAG CTCCATAGGC ACAACTTNTG      480
GGGGCTGCAG CTTACATCC TGGACCCTGC NCAGGGCGTC CTTGATGTCC TGCAGCAGCC      540
CCAGAGCAGG CAGCTGGCAG CGGCCCTCGA G                                          571

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## (2) INFORMATION FOR SEQ ID NO:1234:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 631 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

```

GAATTCGGCC TTCATGGCCT ACTTAATTTA TAGTCTTTTT CTGTGAAAT GATCATTGAA      60
GTAGTTACTA ACAGGTAATG AAATAAAATA CCAATTTTGC TAGTGAAAAA TAGTTTTCAA      120
CTGAGAAAAG CACTTGGCAG AAGACCTACA AACATGCAGG CTAATGCTAC ACTCTATTGC      180
AGCTTCAAAT AAGTTGTTTT TGATGCCTTT TGAGAAGAAC AAATAAGAT GAAAAATAATT      240
CCTTGAACAT TTATCAGCAT TGCTGTTTAG GTACCCATTA GAAAGTGATT AACATTGCGAT      300
ACCTACCCTT TCCAAAACAC AAAATCACTG GCAAGCATCA TCACACACTC CTAAACCAGC      360
AACATCTGAG AAGCACAAAA CACCTTCCCT TTTGTCTAAT AACCTGTTGG TTAGTTATTG      420
GAACTGCAAG GCTTACAAAC TCCTCCCTG TCCTTTATCC TTATGTAAGC TTGCACATTC      480
TCCAGGAATA GCTATTTTCA AAGGTAATTT CAAAAGAATT AATACAATGA ATTCTACTGG      540
GCAGTTTGGG GGAAATATT GACGATATTA AAATTAAAAA AATGCCTGCC TGACACATAT      600
AAGGCCTCCC CAGTCCCTCA TACAACGCA G              631

```

## (2) INFORMATION FOR SEQ ID NO:1235:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

```

GAATTCGGCC TTCGTGGCCT AAGGACAGTG TATAAAAAGG CAGCGTCACA CAGGTGGGCT      60
CTGGGGTCCT TGGTCCATTA GGAGATGGCC TTTGCCTCAG GAAGGAAGGC TTCCAGTAC      120
TTTGCCAGCT GCTGCTGTGA GTAAAGGAGT GTCTCAAGGT ACTTGATGAC GTGGTCTTG      180
AAGTCCTTGG ATTTCTCTTT CTCAAACCGT ATCACTTCTT TTCGGACCAC TGTGAAATC      240
CTCTCGAAGT CCCTTTCATA TTGAGTCACC CGAGAGTCCC ACTCGAG              287

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## (2) INFORMATION FOR SEQ ID NO:1236:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 537 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

```

GAATTCGGCC TTCATGGCCT AGGCTGGCGG GGTAGGGGTT GGTGGTAAG GCTTGAGCAG      60
AAGGTTCTAG ATGCATTGAG GAGATAAAGA TGCATTGGG GTTATTGCAC TTCTCCTAGA      120
AACATAAACA TTGACTTCCT TTTGTGGAAG AAAAATGTTA TGTTAGCTAT TTGACGTTTC      180
AGGAAGGGTG GCTTCAGCTT GGNATNNGG GATGTTTGTC TACANGTGGC CAGGCTGCTT      240
TCTGGCTTGG AAGACTATTG TTTCTGGGA ATTGTCTGTA TCAGACATCA TGGGAGCAGA      300

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```

TCCAGGGCGA CATCAAAGGG AACATGATTN NCNNAGGACC AGAGGGGCTT GGATGCAGAT   360
GATCATCATC TGGGCACTGN TGGATACTGA GTAAGCCCCA GCTGCACCCC ACCTCTGCGC   420
TCTGAGCATG GGAGGCAGCC TGTGCAGCTA TAACTCAGCC TGACTTTTTC CTTCCCTGCA   480
TACTCTTGAA ATACACTGGA GATGAGTAGG GGCGAGTGAG CTGCACACCA GAATAAG     537

```

## (2) INFORMATION FOR SEQ ID NO:1237:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

```

GAATTCGGCC TTCATGGCCT ATCTCCANAT AATTNGATC ATAGGCCGGA GTGAGTCATT   60
CCACCTGCAC CTTTCTGTAC AAATACTAAT TCAATTTTAA GTCTTAAGTC ACTTTTAA   120
TATATATGAT CTTCTGCTCT TCCCACTTCC TCCCNNTCT ACTGCTCTCC CATTTTCCCT   180
TGCTGGGAGT AGCCACATGC TTTTGGCCCC CCAACCCTTG TATATGGGGA CAGTGGGGTC   240
AGTGCAGCTA CCCTTTCTTT CCCTCCTGCG GAACAGCGGA CCCAGCAAGA GCATCCACAT   300
CTCGAG                                           306

```

## (2) INFORMATION FOR SEQ ID NO:1238:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

```

GAATTCGCCT TCATGGCCTA ATTTTCATGCC CCATATTGG CATATAGTGG AAGGAGAAAG   60
GTAGTATTTT TGCAGTATTT AATAACATTG AGCCTTGAAG CTGTTTGGCA AAAGGTAAGT   120
TTCCTTTGTG GCTTTGTGTA AAAACAAGGC ATAGATTAC ATAGATACGT GTTTAATTCT   180
CTGCTTCACT AAAGAAAGCA AATGCCTATT AAGCCACTTC AGTTGGGATA ATCCCTGATT   240
ATTGTGAGAT TGAAATTACT TTGTCAATTT TACAAATAGT TTTTATCTTT CCATTTACAT   300
ATTTACCATG ACAACTCGAG                                           320

```

## (2) INFORMATION FOR SEQ ID NO:1239:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

```

GAATTCGGCC TTCATGCCTA CAGCGATGAG TGCACGAGTG AGATCAAGAT CCAGAGGAAG   60
AGGAGATGGT CAGGAGGCTC CCGATGTGGT TGCATTCGTG GCTCCCGGTG AATCTCAGCA   120
AGAGGAACCA CCAACTGACA ATCAGGATAT TGAACCTGGA CAAGAGAGAG AAGGAACACC   180
TCCGATCGAA GAACGTAAAG TAGAAGGTGA TTGCCAGGAA ATGGATCTGG AAAAGACTCG   240

```

GAGTGAGCGT GAGATGGCT CTGATGTAAA AGAGAAGACT CCACCTATC CTAAGCATGC 300  
 TAAGACTAAA GAAGCAGGAA GACTCGAG 328

## (2) INFORMATION FOR SEQ ID NO:1240:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 279 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

GGGGATCCTT TTATTTTAAAT CACAAAAATG CTGAAAATTT TGGGTTGCAA TTCAATCCA 60  
 CAGTAAAGCA TGGGCATTTT TTTTTTTTTT TTAAATCAGA GTGAAGTCCG TCAGCTCTTT 120  
 CTTTTTAAGG GTTACACTGT ATGTGTTCTG TGTTTTATTT AACTGTTCCC CTCCTGAGGG 180  
 GCATTCCGCT TGTGTGAGCT TTTCTCCCTC TTGCTGACAG TGCTGCAGTA ATCATTCTTG 240  
 TCCATTTTAA TCCCTATGTA TTACACGGT ATTCTCGAG 279

## (2) INFORMATION FOR SEQ ID NO:1241:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 445 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

GAATTCGGCC TTCATGGCCT ACGGAAAAGG AAACCTTGGT GGGATTGCTG TGGATGACAT 60  
 TAGTATTAAT AACCACATTT CACAAGAAGA TTGTGCAAAA CCAGCAGACC TGGATAAAAA 120  
 GAACCCAGAA ATTAATAATTG ATGAAACAGG GAGCAGGCCA GGATACGAAG GTGAAGGAGA 180  
 AGGTGACAAG AACATCTCCA GGAAGCCAGG CAATGTGTTG AAGACCTTAG ACCCCATCCT 240  
 CATCACCATC ATAGCCATGA GTGCCCTGGG GGTCCCTCCTG GGGGCTGTCT GTGGGGTCTG 300  
 GCTGTACTGT GCCTGTTGGC ATAATGGGAT GTCAGAAAGA AACTGTGCTG CCCTGGAGAA 360  
 CTATAACTTT GAAGTTGTGG ATGGTGTGAA GTTGAAAAAA GACAAACTGA ATACACAGAG 420  
 TACTTATTCG GAGAGCATTC TCGAG 445

## (2) INFORMATION FOR SEQ ID NO:1242:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

GAATTCGGCC TTCATGGCCT AATCATGCCT CCTGCTTTTG TCACCTAATA CGTGACAGAC 60  
 TTCTTGCCAT ATGTGGAAAT AGATAACTCT TTCACTATTC TTAATAATGG ATATTTAGAT 120  
 GGCTTCATT TGTCCCTGTT ATTGTTGTAA CATATATTCT TGCATACATT TCCTTTCATA 180  
 CTTACTCAAT TATTAGCTGA ACTTTGGAGT AAAATCACTA AGTAAATACG TTTTAGGCTT 240  
 TTGCTATGTG TTACAAGATT TCCTGTCAGC AATTAAAGAT ACTTTTATTG CTCCTCACAG 300

CCTTGCCAGA ACTCATTGGG AACTCGAG

329

## (2) INFORMATION FOR SEQ ID NO:1243:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

```

GAATTCGGCC TTCATGGCCT AAAAATAGTA AATCCAGTA AATTCAGTGT TTAGACGAGG    60
GAATTTAATT CCTATTTTGT CCATGTTGGT GATGTACTGT ACTTCCCTTC CTTTCTCTG    120
CATCCCCCAT CACCTCATAG AAGACTCTTT GTTGATCATT GTATGTTAAT AATGTATAAA    180
ATGGCTATCT TGTAAGCGTG CTGTCCTGGT ACTAGTGTAG CGACTTTTTT TCTCCTCTTT    240
CTTCTAGTAC ATATTGATAG GTATAACATA ATTAAGGTTT AAAAAAATT AGACATAGTT    300
ATTCAGATTT AGGACCAGTA AGGATAGAAC TTTCTCTTAT TTATGAAAAA AAATGCTAAT    360
AATTTGGGG CAGTTTTTTC CTTAATTAT TTTTTCAT TTCAAGTTTA ATTTTATTTT    420
AGCTGATCTC GAG                                     433

```

## (2) INFORMATION FOR SEQ ID NO:1244:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

```

GAATTCGGCC TTCATGGCCT ACATGACTGA GTATATTACC TCTGTTTGAG AGAGAACCAT    60
TTTCTTCAGA AATTCATATC CTACCGTTCT GCTGTTTTTC ATGATAATTG TTTTCTCCT    120
AACATTATAT TTCTGTCTTT TAGATTTTAG TATTTACCT TTTAGAATAC ATTTTGGATG    180
ATGAAGTTGT TTTTCTTATT TCTCCTACCC CCTTCTCTTC ATCTCAGACA TTATTTCCCA    240
GCTTCTTTG TTTTCTTATT TTATTATGAA AAATGTCAA TGTGCAGAAA AATGGAAGA    300
ACAGTACAAC ACACCCCCAA TCTCGAG                                     327

```

## (2) INFORMATION FOR SEQ ID NO:1245:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

```

GAATTCGGCC TTCATGGCCT ACTGAGAATC TTCACCATTA AACTTAGGAG TGTCTACAA    60
AATAGTGCCT AGAACAGCTA TTGATACTCA AGAGGGCTGT TTAAGTAGCT AGAAAAGTCT    120
AACCTAAAAT CCCATTTGTG ATTAGATTAT GCACTGATGA AAAAATGTTT AATGCCGTTA    180
AAAAGAATCT ATTACATTAT ATTCTTTCAG GCCATGGTAA AGTTACAAAT TTGAACCTAA    240
TAGGCTGTGT GTGTATTTGT ATGTGTGTAT TTTTCTTCT TTTATTGGCA GTCTCAATAA    300

```

TTGTTAAGCC ACCACTGCA CAGTATACAC ACACACTGCA CACCACACACACAGA 360  
 NTGCACACCA CACACAGCAC AACCACCCAC ACTCGAG 397

## (2) INFORMATION FOR SEQ ID NO:1246:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 440 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

GAATTCGGCC TTCATGGCCT AGTGGGCAGA TCACCTGAAG TCAGGAGTTT GAGAACAACC 60  
 TGGCCAAACAT GGTGAAACCC TGTCTCTACA AAAAATAAAA AAATTAGCCA GGGGTGAGGG 120  
 CAGGTGCCTG TAGTCTTAGC TACTTAGGAG GCTGAGGCGG GAGAATCACT GGAACCCACG 180  
 GGGCGGAGGT TGCAGTGAGC CGAGATCACA CCAGTGCACT CCACCCTGGG CGATAGAATG 240  
 GGACTTTTAA AAAAAAAAAA AAACGCCTCA CACGGTTTTA GGTGCTATTA ATACAGTAAG 300  
 AAACAAATAA ACAAAGCTCA TTGCCCTTGA TGGACTTTAA AAAATGATCC AAGTATATGC 360  
 TGTCTGTAAA AGATACACCC TAGACTCAA GACACAAATA AGCAAATCAA AGGATGAAAA 420  
 AGATACACTA TATGCTCGAG 440

## (2) INFORMATION FOR SEQ ID NO:1247:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 466 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

GAATTCGCCT TTNATGGCCT AGCCNAACAA AATGGCGGCG GCAGCGGTGT CGTTTTGTTT 60  
 CCGGGGNTCC TGCGGCGGTG GCAGTGGTAG CGCCTTTGA GCTGTGGGGA GGTTCAGCA 120  
 GCAGCTACAG TGACGACTAA GACTCCAGTG CATTTCTATC GTAACCGGGC GCGGGGAGC 180  
 GCAGATCGGC GCCCAGCAAT CACAGAAGCC GACAAGGCGT TCAAGCGAAA ACATGACCCG 240  
 TGAGCCCATG AGTGAAAGCA AGTTGAATAC ATTGGTGCAG AAGCTTCATG ACTTCCTTGC 300  
 ACACTCATCA GAAGAATTG AAGAAACAAG TTTTCCTCCA CGACTTGCAA TGAATCAAAA 360  
 CACAGGTAAA TTGAAAAAGA ATGTGCTATA CCTTCTAGTC TTTTCTCTAT TTTTCTTAA 420  
 CACTTATGGA GGTAACCAT TATTTTATTC AGAGAGCACA CTCGAG 466

## (2) INFORMATION FOR SEQ ID NO:1248:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 194 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

TTTTGTTTTG TTTGTTTTG TTTTGGTAG AGTTGGAGTC TTGCTGTGTT GCCCAAGCTG 60  
 ATCTCCAATT CTGACCTCA AACAGGTCTC TCACCTTGGC CTCCTCAAAGT GCTGGGAATT 120

CAGGGGT CACCTCACC CAGCCAAGAT CACATTTTGA ATTTT TTTTITTTGA 180  
AACAGTGTCT CGAG 194

## (2) INFORMATION FOR SEQ ID NO:1249:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

GAATTCGGCC TTCATGGCCT ACCTGTGCAA GAACATGAAA CATCTGTGGT TCTTCCTTCT 60  
CCTGGTGGCA GCTCAGAT GGGTCTGTG CCAGGTGCAG CTGCAGGAGT CGGGCCCAGG 120  
ACTGGTGAAG CCTTCGGAGA CCCTGTCCCT CACTTGCACT GTCTCTGGTG GCTCCATCAG 180  
TGATCACTTC TGGACCTGGA TCCGGCAGCC CCCAGGGAGG ACGCTGGAGT CGCTTGGCTA 240  
TATTCATTAC AGTGGGATCA CCAACTACAA CCCCTCCCTC AAGAGTCGGG TCACCTTTTC 300  
AGTAGACACG TCCAAGAACC AGCTCTCCCT GAAGCTGAAG ACTGTGACCG CTGCGGACAC 360  
GGCCGTGTAT TACTGTGCGA GATTTAGTGG TTATTATACT AACCTTCCT ACTACTACTA 420  
CATGGACGTC TGGGGCAAAG GGACCACGGT CACCGTCTCC TCAGCCTCCA CCAAGGGCCC 480  
ATCGGTCTTC CCCCTGGCAC CCTCTCCAA GAGCACTCTC GAG 523

## (2) INFORMATION FOR SEQ ID NO:1250:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

GCCAGAGGGA TGACCGGTGG CTGCTGGTGG CACTCCTGGT GCCAACGTGT GTCTTTTGTG 60  
TGGTCTGCT TGCACTGGGC ATCGTGTACT GCACCCGCTG TGGCCCCAT GCACCCAACA 120  
AGCGCATCAC TGACTGCTAT CGTGGGTCA TCCATGTGG GAGCAAGAGC CCAACAGAAC 180  
CCATACCCCT CGAG 194

## (2) INFORMATION FOR SEQ ID NO:1251:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

GAATTCGGCC TTCATGGCCT AAGCCCACTG GCATCAGACA TGCTTTGCTG TAGTGACAC 60  
TTCNTTTTTC NTTTTCNTT TTTTITTTN CACACAGAGC CNGGNTCCGT CCCCCAGGCC 120  
TGACTGCAGC GGNANAATCC CACCCACNG CCACNTCCG CACCCAGGCC CAAGCGGTTTC 180  
CCTAACGGCT AATGATGTTG AACATCTCTT CATGGGGTTA CATGCCATCT TTATATCCTC 240  
TTCAGTGAAG TGTTCCTTAA CATCTTTTGC TGTTTCTAA TTGGATTACT TGGGGTTTTT 300

TAATACTGAG	TGAGTTA	TTTATATATT	CTAGACAGTA	GTCTTT	GG	GATATGTGCT	360
TCAAAAATAT	TTTCTCCAG	TCTGTAGTTT	GCCTTTTCAG	CCTTTTAACA	TGGTCTTTAG		420
CAGACCAAAA	TGTTTTAGTT	CTTATGAAGT	CCAACCTACC	AATTTTTCCT	TTTCTAGATC		480
ATACTTTTGG	TGTCAAGTCT	CAG					503

## (2) INFORMATION FOR SEQ ID NO:1252:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 589 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

GAATTCGGGC	TTCATGGCCT	AATTGAATTC	ATGATTTGTC	TCTCTGCTTG	CCTGTTGTTG	60
GTGTATAGGA	ATGCTAGCAA	TCTTTGCACA	TTCATTTTAT	ATCCTGGGTT	TCAGTATTTT	120
AAAAACTTAC	TTCAGGTGAT	TCTATGTGTG	CAACCATGAT	TGAGATACAC	TGTTATAGAA	180
TCTAGGATGT	GATAAACTAG	AAGAACATAA	CTAAAGTTTT	GCATTTTTCG	GGTGTCTCAG	240
TTTCCTCATT	TATAGATGGA	GTTGGTATGT	GTACCAAGTT	CATAGGCTTG	TTCTGAGTAA	300
ATTAGTGCAT	GTAAGTGCT	CCACAGAATG	TTAGCTGTTG	TGATGCTTTA	CTTTCCATTG	360
CACCTTCCTGA	CTCCTAGCCT	TTCTTTTCCT	TGGCTCTTTT	TATGCTCATG	TCAGATGCCT	420
CTATTGTTTC	TTTCCCCCCA	GAATATCCTC	CACTTTATCT	TGCTCTGCTC	AACATCTTTA	480
AAGTATAGAA	TCAACAGACT	GCCATGCCAC	CCAGTCTGTC	TGACAATTGA	GGCAAATTCC	540
CTAAGTCCTC	TTGTTCTCCT	TCTGAGATTT	CCACCTGCTC	TAACCTCGAG		589

## (2) INFORMATION FOR SEQ ID NO:1253:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 702 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

GAATTCGGCC	TTCATGGCCT	ACATTTATCG	AGTCTTTAAT	TAATGCCCTG	GGTAACTATA	60
AGGTTGGAAC	TGTAATTGTC	ACCATATTGA	TGATGAGAAA	CTTGAGAAAG	GATAAGTGAC	120
TTGTCTAAAA	TCACACAGTA	AAACCTCAAA	TCAAACCCAG	GCCCCTCTGGC	TCCAGACTCT	180
AAATTATACT	CTGAATGATA	CTCACTGATT	GTCCGAGGAC	ACAAAGACTG	TCCAGGCCACT	240
ATCTGCTGGG	TGTCTGCAGA	ACCTTACTGT	TCTAAAGCAA	AACATTTTAC	CCCTGGACAA	300
GAGCAGCAAA	GGTGGCGTTC	GGCCCTCCTT	GGCTCTCATT	TGACTGTTCA	AAGCCAGGTG	360
CTTTTCTTTC	TTGGGTGAGA	ACGTATTTTC	AGCAGCATTT	TGAAGCACCC	CTGGCGTGCA	420
CTGCACAGGG	AAACCAGGAC	CACATTGGTG	TGCTGTGTCC	TCCTTACCAA	CTGGCTCTTG	480
GAGAAGGTGA	GACAGAAGTA	GCTGAGACTC	CATTCTGAG	ATCTTCACTT	AACAACCTCT	540
GCAGCTTGTG	CAGAGCCTTA	CTAGAAATAC	TGAAGGCAGA	AGTCCCTGGA	AAATAGGGCC	600
CATAACTAAT	TAGTAATTTG	TTTTTGAGTA	ATTTCTTACC	GTTATTTGAG	CACATTCTGC	660
AGTCCAGGCA	TTTTGCTAAA	CTTTACATG	GCAGGACTCG	AG		702

## (2) INFORMATION FOR SEQ ID NO:1254:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

```

GAATTCGGCC TTCATGGCCT AAGCAAGTAA ACACTGTATA TCTGTAATTG GAAAGTTGGT      60
GGGAAGATTA CTTTTCATT CTTGATGTGG CAGCCTTAAG TGCCATCACA GCTTGTTCTG      120
TGGTTTGCCT TTTTTTTTGC AGTGACCTCA GCTCACTGCA ACCTCCACCT CCCTGGTTCA      180
AGCAATTCCC CTCTTCAGC CTCCAAGTA GCTGGGATTT CTGGTGCATG CTACCAAGGCC      240
TGGCTAATTT TTTTTGTAT TTTTAGTATA GACAGGGTTT CATCATGTTG GCCAGACTGG      300
CCTCAAATC CTGACCTCAG GCAATCTGCC CACCTCAGCC TCCCAAAGTG CTGGGATTAT      360
AGGTGTGAGC CACTGCGCCC AGCCGACTTT CAAATTTTTT AACCACAGCC CAGTGTAAAC      420
CTGTGTGTAT GTGTGTGAGT GTGCTGTAT GTGTGTTGA AATAAAATTT TTCATGTGCT      480
TAAACATTCT GATTTTTTTT TTATCAGAAC CACTAATGAG ATGAGACCAT AGTTTGTAAC      540
ACCTCATGCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

```

GAATTCGGCC TTCATGGCCT AGCTCCGGCA CATGGCAGGC ACTCAGGGAA AGTATGTAGC      60
CTTATGAACT GACTGATCTG AGGAGGGCAC TTCTGTAAGC CATAGTATTG GTCAGTGGCA      120
TGAGGCCACC TACTGGATCC CTGCCATCCA GCCCTGGGAG TAGCATGAAG CAGCATGGCA      180
CTGGCCTTCT GGAAGCTTGG AGAGGAGTCT TACCCAAGCT TTGCTCCTAG ACATTAAACT      240
TCCAGCTGG GCACTAACAT GTGGCTGCAG AACCTGCCCT TGCTCAGTCT GTCCCTGGTG      300
CAGCTGCTGG GAGAGCCTGC CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

```

GAATTCGGCC TTCATGGCCT ACATTAAGGC AGCTTTGTAA GTAAGTACAA AATATATTTT      60
AACCTACACA ATTTTATTA GTTTCCTCT CTTTGAAG TACACCGACT CTAAAATGAA      120
TGAAAGTCTG ATTACTTGCC TTAGGTTGGG GGCTTTATCC AAGCTCTACT AAGTGAAGCT      180
AAAATAAAGG ACATTGTTGT ATATTGTATT TTAATGTATA CATTATTACC TCCTCAGCAA      240
AGTGAAACAT AGCTAAACT TGAGTATATA TTCCCTTCAT TTCTCTTCTT AGTTCCTTTT      300
TGGCATCTCA TGCTGAACAA ATCCAAATA GATTTATTAA TGCCTTCCCC CAACACAAAC      360
AAAACCAGAA GAGTCTTCG CTTCTAGACC TGCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid



(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

GAATTCGGCC	TTCATGGCCT	ACTGAGTACA	GGTTTGGGAT	CTACATACCC	AGATCAACAG	60
CATGTGGCAT	CACCTGGCCC	AGGTGAGCAT	GACCAGGTAT	ACCCAGATGC	AGCTCAGCAT	120
GGCCATGCTT	TCTCTCTCTT	TGACAGTCAT	GATTC AATGT	ATCCTGGTTA	TCGTGGCCCA	180
GGGTATCTAA	GTGCTGATCA	GCATGGCCAG	GAAGGTTTGG	ATCCAAATAG	AACACGAGCC	240
TCGGACCGAC	GTGGAATTCC	TGCCCAGAAG	GCCCCAGGCC	AAGATGTCAC	TCTTTTCAGG	300
AGTCCAGACT	CCGTCGACCG	AGTCTTATCA	GAAGGGAGCG	AAGTCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 335 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCGGCC	TTCATGGCCT	AATTGAATCG	AGCTGGTTAA	GTTTCACTAG	GAGGCGCNAA	60
AAAGGAGCCG	TTTTTGACTT	AACATTTTAA	TTCTAGTAGA	GATAAGAAGA	GCTTGTGTGG	120
GCTTACAGTC	CTTCACCTGA	CTGTCCTTCA	CCAGTGAGTA	GCATACCAGT	TCTTCAAATG	180
TCCTATACTT	TGGAAGCAG	ACCCGACTCT	GGAGCACTCG	CCTTAATTAG	ATTCTGAATT	240
TCCTTGAATT	TTGGATGGTC	CTTATCAGCT	ACCAGCTGAA	GCAGAACAGC	CTCACTCGTG	300
GTCACTATGA	TCCCGGTTTG	AGCGAGACGC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 621 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

TCCAGTTGAA	TTAATAGAA	TTCGGCCTTC	ATGGCCTAGC	CGACCGTTGA	CTATTCTCTA	60
CAAACCACAA	AGACATTGGA	ACACTATACC	TATTATTCGG	CGCATGAGCT	GGAGTCCTAG	120
GCACAGCTCT	AAGCCTCCTT	ATTGAGCCG	AGCTGGGCCA	GCCAGGCAAC	CTTCTAGGTA	180
ACGACCACAT	CTACAACGTT	ATCGTCACAG	CCCATGCATT	TGTAATAATC	TTCTTCATAG	240
TAATACCCAT	CATAATCGGA	GGCTTTGGCA	ACTGACTAGT	TCCCCTAATA	ATCGGTGCCC	300
CCGATATGGC	GTTTCCCCGC	TGCATGCTAG	TTATATTCT	CCAACATAGA	TAAATACAT	360
ACATGACTAT	TAAAATCTCA	GGGTTCTTCT	ATGTGTCCCC	TAAAAGCATG	ATGTATGCCA	420
GTGGTCACTCT	GTCCACCACC	ATTTGGGGAC	CACGGCATT	AGGTAAAGTG	GGTCTCGGAT	480
GACCTCCTTC	AGCTTAACAG	CAGGAGTTGA	GATGGAGCCC	TTGCAATTTC	CCCACTGAAT	540
TCCAGAAGCA	AGGAGAAAGA	CTGAAGTGAC	AAGTACCGCA	AGACAGACTT	CAGGAACAAT	600
TCGTTTAAGC	TGCAGCTCGA	G				621

(2) INFORMATION FOR SEQ ID NO:1260:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

```

GTTTGTGAT TCTCCAGGAC AGATGATGAA AAACAGTGTA GATAGTGTC AAAATTCAC      60
TGTAGCCATA AAATCTCGAC CTGTTTCAAG AGTTACCAAT GGAACCTCCA ATAAAAAAG      120
TATTCATGAA CAAGACACTA ATGTAAATAA CAGTGTACTA AAGAAAGTCA GTGGCAAAGG      180
ATGTAGTGAG CCAGTACCAC AGGCAATTTT GAAGAAAAGA GGAAGTAGCA ATGGATGTAC      240
TGCAGCTCAG CAGAGGACAA AGAGTACCCC ATCTAATCTT ACTAAAACTC AAGGATCCCA      300
AGGAGAGTCA CCAATACTCG AG                                         322

```

## (2) INFORMATION FOR SEQ ID NO:1261:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

```

GCCCTCATGA CTCGGATCCA ACCTGCCTCG CAGGGAGTCG AGCTCTCCGG CCTCTCAGCC      60
GCCATCAGCC ACTTCCTGAA CTGCTTCCTG AGCTCCTACC CAAACCCCGT GGCCCACCTG      120
CCCCCGGACG AGCTGGTCTC CAAGAAGCGG AATAAGAGGA GGAAAAACCG GCCCCGGGG      180
GCTGCAGATA ACACAGCCTG GGCTGTCATG ACCCCCCAGG AGCTCTGGAA GAACATCTGC      240
CAGGAGGCCA AGAACTACTT TGACTTCGAC CTCGAG                                         276

```

## (2) INFORMATION FOR SEQ ID NO:1262:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

```

GAATTCGGCC TTCATGGCCT ACAAAGAAAG CAAGCCACAA ACAATAATGA AGCAAAAAAT      60
GGAATCTAAG AATCTTTTGG TATGGAATAT TACTTCTATC AGAAGATGAT CAAGATGTTT      120
CAGTCCAGTG CACATCAGCA TTGCTGACAT TTTATGGATT CTAAACTTGT GTTGTTTCTT      180
TTTTAAATCA ACTTTTAAAA AAAATAAAGT GTAAATTAAC CGACTAGAGT ACTTGGAATA      240
TGTGATCAGT ACAAGTGAAC TTAGGTGTT GCCAACAGGG TCCGTACTCG AG                                         292

```

## (2) INFORMATION FOR SEQ ID NO:1263:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

```

GCGATTGAAT TCTAGACCTG CCTTGATGCC AACTAAGGAA ATTTGTTTAG CATTGAATCT    60
CTGAAGGCTC TATGAAAGGA ATAGCATGAT GTGCTGTTAG AATCAGATGT TACTGCTAAA    120
ATTTACATGT TGTGATGTAA ATTGTGTAGA AAACCATTAA ATCATTCAAA ATAATAAACT    180
ATTTTATTA GAGAATGTAT ACTTTTAGAA AGCTGTCTCC TTATTTAAAT AAAATAGTGT    240
TTGTCTGTAG TTCAGTGTG GGGCAATCTT GGGGGGGATT CTTCTCTAAT CTTTCAGAAA    300
CTTTGTCTGC GAACACTCTT TAATGGACCA GATCAGGATT TGAGCGGAAG AACGAATGTA    360
ACTTTAAGGC AGGAAAGACA AATTTTATTC TTCATAAAGT GATGAGCATA TAATAATTCC    420
AGGCAAATGG CAACTCGAG                                     439

```

(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 486 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

```

GAATTCGGCC TTCATGGCCT AGGGGAGGCC GCGNGGGGA AAATGGCGGA CGGGAAGGCG    60
GGAGACGAGA AGCCTGAAAA GTCGCAGCGA GCTGGAGCCG CCGGAGGTGA ACACAACCCC    120
AGCGTCGTGG GCAGCGTGGG ATGCTCCGGG CTTTCTTTG AGCTCCCAAG GTGGGGGGAG    180
TGGGTGGGG CGAAAATGGG CGGATCTGGA CTCACCCGG ACAGGTGTTG GGCCAGACC    240
TGCCTCCGGG CNCGCCCGA TGCGGCCCTC CTGGGCTCCG GGCTACATC GCCTCCTTGC    300
CTGGGGAGAG CCGGCCACTG TTCGTCACTT CTGGCCCCA GCGGAGGCC TGATTCGAG    360
GAGAAGGGAG ATGGGCGCCA GAAAGGGAGA CCGAACTCGG GGTGGGACCA GGAGCGGCGG    420
TGCAGGAGCC GCTACCGCCA CACCGGAGAC GCACATCACA CAAAACACAC ACACCGGATT    480
CTCGAG                                     486

```

(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

```

GAATTCGGCC AAAGAGGCCT AATTTATTGT TGGATCAATC AAAATTTTCA TCACTTAAAA    60
GAACCATGTC TATTAAAGAA TCTAGCTCAC TGGAGTGCAT TGCCATTCCA AAAAAGAAGA    120
TGAATTTAAA AGATAAAAGC CATGAAGGTG TTGCTTGTGT CCAGAAAGAA AAATCAGTAG    180
TAAAACCTG GTTCTGTGAA TGCAATCAGC GATCCCAAG TGAAGATGCA GTAGAAAAGC    240
ATGTTTTTCT AGCAAACACA ATGGGTATA AATGTGTGGT CTGTGGAAAG GTATGTGATG    300
ATTCAGGGGT TCTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

```
GAATTCGGCC AAAGAGGCCT AATCTTTTCC TTTCTTGTA GTTAGAAGAA ATAACCTCTT    60
CAGTTAAACC TTCAGTGAAG GTTCTTTTAG TTTCTGTTC TGCTTTCTAA AACATAGAC    120
TCTGTTCTTT AGAGCAACTT ATGACTCTCA TCTCTGCTGC ACGAGAATAT GAGATAGAGT    180
TCATCTATGC GATCTCACCT GGATTGGATA TCACTTTTTC TAACCCCAAG GAAGTATCCA    240
CATTGAAACG TAAATTGGAC CAGGTAACCT CTTACTTTTT ATTCATTTTT CCTGACTATG    300
TACTTGAAAC TAGAAGTTTA CTCAGTTGCT TTTACGATGT TAAAAGGAAA TCAAATTCCT    360
ATTTCCTTGT TTTCTTTTTT TGTTTGTGTT TTTTGTTTTT TGAGACAGAG TCTTGCTCTG    420
CACTCCAGCC TTGGGCAACA GAGCAAGGCT CTCAAAATAA AAAAGCAGCG ACACTCGAG    479
```

(2) INFORMATION FOR SEQ ID NO:1267:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 615 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

```
GAATTCGGCC AAAGAGGCCT AGGGTTTATG CCAACAAAAG GAGAGGGAGC CATAGGTTCT    60
CTAGATAACA CTCCTGAGGA AAGAAGAGCA CTTGCCAAAA AATCACAAGA TTTCTGTTGT    120
GAAGGATGTG GCTCTGCCAT GAAGGATGTC CTGTTGCCTT TAAATCTGG AAGCGATTCA    180
AGCCAAGCTG ACCAAGAAGC CANAGAACTG GCTAGGCAAA TAAGCTTTAA GGCAGAAGTC    240
AATTCACTCT GAAACACTAT CTCTGAGTCA GACTTAAACC ACTCTTTTTC ACTAACTGAT    300
TTACAAGATG ATATACCTAC AACATTCCAG GGTGCTACGG CCAGTACATC GTACGGACTC    360
CAGAATTCCT CAGCAGCATC CTTTCATCAA CCTACCCAAC CTGTAGCTAA GAATACCTCC    420
ATGAGCCCTC GACAGCGCCG GGCCCGAGCAG CAGAGTCAGA GAAGGTTGTC TACTTCACCA    480
GATGTAATCC AGGGCCACCA GCCAAGAGAC AACCACACTG ATCATGGTGG GTCAGCTGTA    540
CTGATTGTCA TCCTGACTTT GGCATTGGCA GCTCTTATAT TCCGACGAAT ATATCTGGCA    600
AACGAATACC TCGAG                                615
```

(2) INFORMATION FOR SEQ ID NO:1268:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 515 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

```
GAATTCGGCC AAAGAGGCCT ACAGAACTTT TGTCAAATGG AGTGTACCC ACAGTCAGAA    60
TCTAGCCACC AAAATGGGAA GGGAGTGNAG CTGCCCTGTC CACAGGCTTC TCTATGGGAA    120
ANGCTGCTGT TCTGTAAAC ATGNTGGGGC NGGCTGTGGG GANGAAGGCA TTTTCTGGAC    180
CACATGNACG AATTCGAATT GGGGGACGGT CCTACCCAG TGAGGAAGCT GAAAGAAATG    240
GGCCTGATT TGTGCAGGAC ANCCCTGAA GACCGTGAG CCCCTGGCCT CTGCCGAGA    300
```

```

TGGGAGCCTC ATGACANGG TTTAGGGCAG CACCCAGGGC ATCCTTAA CGTGAGGCTG 360
CCGTTGGTGC CTGGGCATCA GTAGCTCAGG CTGGAATAAT TGGAAAGGAA AAGGCAGGAG 420
GANCCCCCTGA GGCCAGGCCA TTGGGCTGGG GAGCTGTTAA GCTGAGGTGG CCCTAGGGCC 480
TGCCGGGGCT GGGGGTGGCA AGCCAACTC TCGAG 515

```

## (2) INFORMATION FOR SEQ ID NO:1269:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 229 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

```

GAATTCGGCC AAAGAGGCCT AGTGCAACTG ATCTGTCCAG TTTGTGTATG AAATGGATTT 60
GATAAAGTTT TTGCTAGTTA TTTACTACAT TTGGGGATTA ATAAGTGATT TATATGCATA 120
TTTTTCTGTA AATCTACAGT TTTTGTACA AGATATTCTA CAAGTTATGA AGCTAAGGGA 180
AGAAAATGCC AAAGATACCT CTAGTTATGT TGAACACAGC CAGCTCGAG 229

```

## (2) INFORMATION FOR SEQ ID NO:1270:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 128 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

```

GAATTCGGCC AAAGAGGCCT AGTATGCCCT TAAATCTGGT TATTAGGTAA TTCTTTTCCG 60
AGTAGGAGCC CAGATCAACT CACAGTGTTT CTGAGTCCTG GGAGATTGAA TTCTAGACCC 120
GCCTCGAG 128

```

## (2) INFORMATION FOR SEQ ID NO:1271:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 412 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

```

GAATTCGGCC AAAGAGGCCT ATTTAGCACA AATTCTTTT TGCTTGCCTT TTCAGATTTT 60
AAACTATTA GAGAAAAACA TACTTGATTG CTAATAATTG TCAAACATAA ATAGTAGACA 120
CAATTTAGTA ATAATCATAT TAATAATCAT AATCATTAACT ACTCATAATA ATCANACAGA 180
GGACGCCCTA AAATGTACAC TGATTAAAT TTTATTTTTC CCCATGCATA GCTAGCCTGT 240
TTGTACAACT TTACTTTTGC TGCTGCATGT AACCAGATGA TTTTAAATC AGATTACTGC 300
CTTCTGATT TATTTAGAAT TTTTTCCTT TTTTTCCTT AAGAGACGGG ATCTTATTCT 360
GTCGCTCAGG CTGGGGTGCA GTGATGTGAT CCTAGCTTAC TGTATTCTCG AG 412

```

## (2) INFORMATION FOR SEQ ID NO:1272:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 480 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```
GAATTCGGCC AAAGAGGCCT AGTTTAAAG GACAGGTTTA AATAGGCTTA CTTTTTCTT    60
TTAAGTTCAG ATACCTAAGC CTTATGTCCC TAGCCGCAGT TTTCAGATAT TTGCAGCTAA    120
TTAATTCCTTA GGAAATCTAA TCTGAATTGA ATTAATTTTC CCTTTTAGGG CACACGAAGC    180
AACTTTTAGG TAAGAAAAA AATGAAAACA GCTTTTGTG CACATAATTC TTGCAACTAA    240
TGAAAAGTAA TATTGCTGTT CCCTTCAAAT AATGCAATAA CAAAACACCA AATGAGAGCA    300
TTGCATTGTA TTGTTATATT TGCTGTTAA ATAATTTAGC TGCAAAAATC TGAGGGCTGC    360
TTTAGCTGTA ATTAATTATT CATTAAATGAC ATGCTAATTG CACAATACCT TTGAATATTT    420
AACAAATGC AAAAACCAGG CTCTGAAGTT ATGTTTTTAG TGCAAGGGGG ACACCTCGAG    480
```

(2) INFORMATION FOR SEQ ID NO:1273:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 293 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

```
GAATTCGGCC AAAGAGGCCT AAGACCAGCC TGGGTGACAG AGCGAGACTC CGTCTCAAAA    60
AAAAAATTGA ATGAAGCAGA AATTTATTCT TTTAAGCCCA TTTAGCTGTT ACACACATAG    120
TTATAGCATA TTCTCTCTTG AGATAACTTG CTTTAAATTG GAAACTAAT TCATTAAATA    180
TCCAACTCT ATATCATTTC TGAATAAGT GATTTAGCA ATTTTGTATA CTTATTCTAA    240
CATGATGCAT ATATTGAGTA TGTACTTTTC TTAAATGCA GGCAATACTC GAG          293
```

(2) INFORMATION FOR SEQ ID NO:1274:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 194 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

```
GAATTCGGCC AAAGAGGCCT ACCGCTTTT TTTTTTTTT TGATAAAGAG AAGCCACCAC    60
CAGGAGGAGG CTTGAAAGCT TGAATTTAAT TACTCCTCCA TCTCCTCATT ATTCCACCCA    120
ACTCCCTACT TCCCCTCTC ATTTACAGC CTCCACCAGC TCTCCCTCA GGCCTCCTAG    180
ACATCGCGCT CGAG          194
```

(2) INFORMATION FOR SEQ ID NO:1275:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 164 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

GAATTCGGCC AAAGAGGCCT AAGAAGAAGA AAGAAAAATT GGAGAGAAAA AAGGAGTCTT	60
TAAAAGTTAA AAAGGGTAAA AATTCAATTG ATGCAAGTGA AGAGAAGCCA GTTATGAGGA	120
AAAAAAGAGG AAGAGAAGAT GAATCATACA ATATTCAGA GGTC	164

(2) INFORMATION FOR SEQ ID NO:1276:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 465 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

GAATTCGGCC AAAGAGGCCT ATTTGGATGG CAACGAGCTC ACCCTGGCTG ACTGCAACCT	60
GTTGCCAAAG TTACACATAG TACAGGTGGT GTGTAAGAAG TACCGGGGAT TCACCATCCC	120
CGAGGCCTTC CGGGGAGTGC ATCGGTACTT GAGCAATGCC TACGCCCGGG AAGAATTCGC	180
TTCCACCTGT CCAGATGATG AGGAGATCGA GCTCGCCTAT GAGCAAGTGG CAAAGGCCCT	240
CAATAAGCC CCTCCTGGGA CTCCTCAAC CCCCTCCATT TTCTCCACAA AGGCCTGGT	300
GGTTTCCACA TTGCTACCCA ATGGACACAC TCCAAAATGG CCAGTGGGCA GGGAAATCCTG	360
GAGCACTTGT TCCGGGATGG TGTGGTGGA GAGGGGATGA GGGAAAGAAA TGGGGGGCCT	420
GGGTCAGATT TTTATTGTGG GGTGGGATGA GTAGGACAAC TCGAG	465

(2) INFORMATION FOR SEQ ID NO:1277:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 302 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

GAATTCGGCC AAAGAGGCCT AACTGTGGTT CTTACATCCT AACAAAAGCT GCCCTCCCCG	60
CACATTCTTT TGTATGTTCC TTAAGCTTAA AGATGAATAG ATGCTTAAAG TATGCAACTA	120
TGGCATTGG AGTGCAAGAC AACTTGAAAA AGAGTGTGAA AACATTGTCA GATATAAAGT	180
TACTTCAATT CTTTGGAGTC TGTTTCCTGT CATGCTTAGA TGTTTGAAT CTTAAAGTTA	240
CAGAGGAAGT GTTCTCTGGT AACAAGACAT GTCTGAGTTT GTGGACTGCA CGCGATCTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 401 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

```
GAATTCGGCC AAAGAGGCCT ATAGGCCTCT TTGGCCGGGT TAGCCTAAAG GAGAAAAAAG      60
CAAGGCTCAA GAGAAATTAG ACAGCAGCTT TCAAATATTT TTAGAGAAGT AGGTTAATTA      120
TGGTAGTCAT TCAACAAGGT AGAAATCATA CCAAGCATGA AGTCACAGGA ATGTCCCAGG      180
AGTGTGCAAC CATTGGAAGT GTCCATAGTA AAATGGGCCA GCTTGAGCAA TAAAGTCTC      240
CTAGTACCAG GAAATGCTTA GAGGTTGGGG AAAGTGAAAA AAAGGGGGAA AGTTTGGTCA      300
GGTTGGGGAG CAGTCACACT TCTTCCTGAG AGGTAGTAAA TACCAGGCTC TCCATCTGGA      360
GGAGGGGTCA GTAAATCAG TTTGCAAAGG AATATCTCGA G                        401
```

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 391 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

```
GAATTCGGCC AAAGAGGCCT ACCCACCCT ACTCCTCAAC ACTTCTGGTT TGCCCTGACT      60
TCTCTACGGC TCTGGCTTCT TCCCGAAGAG ATATAGGAGC CATGTAAGCA CGCAGTGGGT      120
GAACTGCTTA ATTTCACTAC ATGTTGATGT ACTTGCTCTC CGTCCTGTAG GTCTTTTCTA      180
TATAACTTTA TGCCACCCTT AAATGAATCA TTGGGTATAC CTGTCATGTT GGATCCTGTA      240
ATCACAGTTT TCCCTGCTCA CCTTTTGTG TAAGATCTAT TGAGAAAGGG AAAATATGGGA      300
AGGAGAACCA TTTGATCAGA ATACAACCAA TAGTCTTTAA GCATTGTTAA AGTATGAAAC      360
TGAAATACAT TCAAACACT TTCACTCGA G                        391
```

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 326 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

```
GAATTCGGCC AAAGAGGCCT AGGACTCCAC ACTCCCCAGA TCCCAGTATG ACTACATCTT      60
GCCTCAAGTT TCTTTCACCG CAGTGGGCTA CCATAAACAC ATCACCTTGA TTTTAAATCC      120
CACGAGGAAG CTGCCTGAAC AGGACATCGC ACAAGGATCC TACATTGCCC TGCCATTGAC      180
GCTGCTGGTT CTGCTGGCCG GTTACAACCA TGACAAGCTC ATTCCTTTGC TGCTGCAGTT      240
GACAAGCCGG CTACAGGGAG TCCGCGCGCT CGGCCAGGCA GCCTCTGACA ATAGCGGCC      300
AGAAGATGCA AAGAGACAAC CTCGAG                        326
```

(2) INFORMATION FOR SEQ ID NO:1281:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 367 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear



(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

```
GAATTGGGCC AAAGAGGCCT ACAGATGCAG ACACGGTGTG CGACGAGTAT TCTGACGAGG      60
AGGTGGTGGG GGACGTGGAT GATGCCGCCT ACTCCATGGT CAGTGCCTCC CATGTGACCG      120
CCCGCACCTG GGCCGCTGTC CGTCTAGCGC TCTAACAGTC TTACACCTTG GCTTTCTCTG      180
TCCCTTGAAA GAATTAATA TATCTACTGT GGACTGTTTC ATAAAACCAA CCTATGGTGT      240
TGCCGGGCAC AGAACAAAGC TGTGTTTCAC TACTGAAGGG ATGATTGGGT TTCTATATCA      300
TAATTACTTT TAGCTTCAGA ACAGACCCTT GTTCAAACAT CTCATGATCT TCGCTAACCA      360
TCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

```
GAATTGGGCC AAAGAGGCCT AAGAGAAGTG TCAGCCTCAC CTGATTTTTA TTAGTAATGA      60
GGACTTGCCT CACTCCCTC TTCTGGAGT GAAGCATCCG AAGGAATGCT TGAAGTACCC      120
CTGGGCTTCT CTTAACATTT AAGCAAGCTG TTTTATAGC AGCTCTTAAT AATAAGCCC      180
AAATCTCAAG CGGTGCTTGA AGGGGAGGGA AAGGGGAAA GCGGGCAACC ACTTTTCCT      240
AGCTTTTCCA GAAGCCTGTT AAAAGCAAGG TCTCCCCACA AGCAACTTCT CTGCCACATC      300
GCCACCCCGT GCCTTTTGAT CTAGCACAGA CCCTTCACCC CTCACCTCGA TGCAGCCAGT      360
AGCTTGGATC CTTGTGGGCA TGATCCATAA TCGGTTTCAA GGTAAACGATG GTGTCGAGGT      420
CTTTGGTGGG TTGAATATG TTAGAAAAGG CCATTAATTT GCCTGCAAAT TGTTAACAGA      480
AGGGTATTAA AACCACAGCT AAGTAGCTCT ATTATAATAC TTATCCAGTG ACTAAAACCA      540
ACTTAAACCA GTAACGAG
```

(2) INFORMATION FOR SEQ ID NO:1283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

```
GAATTGGGCC AAAGAGGCCT ATTTTCATCA ATAGTAAGTT TTTATTGTCT GCTAATTGG      60
TAGATAAGTT GAGACATCTC ATTGTTACTT TAATTGTCAT TTTCTCCACA TTAGAAAATA      120
TTTTCATTGG TTTATTGACC ATTTGCATTT CTCTTCTATA AATTGACTTT TTATATTTAT      180
TTGTCTCTAT TTCTGTATTC TGTGATAGT CAATTTATAG GAACCTTCTG ACAGATATGC      240
ATATTCATTT TATGTGTGAG TTATTTTGT GGCACACT CGAG
```

(2) INFORMATION FOR SEQ ID NO:1284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

```
GAATTCGGCC AAAGAGGCCT ACTTCGGTTG CGGGATTCCCT CCTCTGCCTG GGTCAATTCTT    60
TCTCGTGTCA TCTGATACGA GTCGTTTGTG GCACACACTG TAATTTTATC TTGTATAAAT    120
CCCAGGCAAT TGAGCTGGGA GGCTCCAGAG CTGGAGAATG TTTGCTGGAT GCAGTCAAAG    180
CTGCCCTGAG GGTGTCTTTT GCCCACATTT GACAAATAAA AGTTAAAGTT ATGAACTTCA    240
TTGAGGGGAT CATTTTGGG AATTTTGACA AGCCCGTGA GTCCTTGGAA CTGGATTGAA    300
GGTCGAAAAG GAATTAAATT CTGTGGCTC TGGTAAGTCT CGAG                        344
```

(2) INFORMATION FOR SEQ ID NO:1285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

```
GAATTCGGCC AAAGAGGCCT AGGGAATTG TTTTGCATA GGGGAATAGG TAAACCAAAA    60
GTGGTATTAA AAGCAGTGCT ATAGTAAAAG GAGATTTTTT TTAAGTCCAC AATAAAAAGT    120
TTAGGCCCAA TTTCATAGTA AAACATATCT AATTAAGGAT TGAACATATT ATCACTTGCC    180
TTGATTTTGA CCAGTGACAT TTTTGGCTT CTTCATTTCA CTTGTGACCA TCTGAATGCT    240
TTCTATTTGG CTCTTAATG CCCAGATTTT ATTGACATTG GTGGCGAATC CCTATTCTA    300
CACAGACAAA GCATCTGACT TTGTCCAAGA AGCAAGCATG CTGCAGGCCA CTATGACGAA    360
GCAAGAAGCC GATGACATGA GCATTCCCAT CTCCCACATT GACGATGTTT TCGACATGGT    420
GGATGTCCTG GTGGAGGGCA GTGAAGGCTT GGATGAGGAA ATAGGGTTCA CGTTGAGTGA    480
AGACATGATC CTGCTCACGT TCCCATTGAG TCGGGTAGTC CCTGCGGCCC TGAAGCCAG    540
GAATAAGTTG CTCCTTGGGA CAGGCAATGA AGCAGATACC CTCGAG                        586
```

(2) INFORMATION FOR SEQ ID NO:1286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

```
GAATTCGGCC AAAGAGGCCT AGTTGAACAT AACTTGTAAGT GTGAATATGG TTAACAACAAA    60
GGACACCTGA TGTCTGTGAA GTCTGCTAAG GACAGGTACA AAATTTATGC ATTGCTTTTT    120
AAAAAGTTTA AAATGAGGAA TGCTTTTGAT AATCAGAAAAG ACTAATGTAA AGTGCTGACT    180
GATGTCCTGT CTGCAGTTAA GGAAGACACC CAACTCTCTT CTTCCTCATC ATGGTATTCT    240
CTATGTATAG ATCTCTAAAA ATGCAAACTT CCTATGGACA AGACAATATG ATTTGCTATA    300
ATATGAATTA AGATATGGTA ATATCTAATA GTCTCCACTG CTAGGATTCT GAGTAACACA    360
AAAAATAGGT TTTATAAAAA GCCCATGCAC TTCAATTGGT GGGGGAAAAG AATAAAGTCA    420
TTTTCACTCG ACTGACTCTG TAAAACAGAT TACCAATATA ACAAGCTATG TTATCTAAAT    480
TGCCCTGGCT ACTCGAG                        497
```

(2) INFORMATION FOR SEQ ID NO:1287:

- (i) S CE CHARACTERISTICS:  
 (A) LENGTH: 329 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

GAATTCGGCC AAAGAGGCCT ACAGGAGTTC ATTTTCATCC AAAACAAACA CTGGACTTCC	60
TGCGGAGTGA CATGGCTAAT TCCAAAATCA CAGAAGAGGT GAAAAGGAGT ATAGTAAAC	120
AGTATCTAGA TTTCAAACTT CTCATGGAAC ATCTGGACCC TGATGAAGAA GAAGAAGAAG	180
GGGAGGTTTC AGCTAGCACA AATGCTCGGA ACAAAGCAAT TACCTCACTG CTTGGAGGAG	240
GCAGCCCTAA AAATAATACA GCAGCAGAGA CAGAAGATGA TGAAAGTGAT GGGGAGGATA	300
GAGGAGGAGG CACTCCCGGG GAACTCGAG	329

(2) INFORMATION FOR SEQ ID NO:1288:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 459 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

GAATTCGGCC AAAGAGGCCT ATGCATCGCG GGAGGCGCAT GGCGGGGATG GCGCTGGCGC	60
GGGCCTGGAA GCAGATGTCC TGGTTCTACT ACCAGTACCT GCTGGTCACG GCGCTCTACA	120
TGCTGGAGCC CTGGGAGCGG ACGGTGTTCA ATTCCATCCT GGTTCATT GTGGGATGG	180
CACTATACAC AGGATACGTC TTCATGCCCC AGCACATCAT GGCGATATTG CACTACTTTG	240
AAATCGTACA ATGACCAAGA TGCAGCCAGG ATCAGAGGTT CCTTGGGGAA GACCCACCCT	300
ACGAAGTTGG AATGAGACCA TCAGATGTGA TAAGAACTC TTCTAGATGT CAACATAACC	360
AACCTTATAA AGACTAAAT TCATGAGTAG AACAGGAAAA TCATCCTGAC TCATGTGTTG	420
TGTTCTTTAT TTTTAATTTT CAAAGAGGCT CAGCTCGAG	459

(2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 333 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

GAATTCGGCC AAAGAGGCCT ACTACCTGCC TGAAATTCAA TGCCGTGTTT CTTCTGGACC	60
AGTTTTAAGC CATCTCTTCT GTTGTTTCTT TCCTCCCAA GATGTAGACT TTTCACTTA	120
AAAGCATTTC CAAGATTCTA TTTTTCATC CTTTTCCTG TCCCTATTCT CTTCACTCC	180
CCACACTTGT TCCTAGCCTG TCTCTGTTGC TCTGATGTCC ATGTTGATGG TGGCGTCTT	240
CAACCATGCC ATCCGTGTGC CAACCCAGCA CTTTCCTGCC ATCCCTGTAG CCCTTGCCCC	300
AACATCTGTG CATTTGACTC CCCACCACTC GAG	333

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 326 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

```
GAATTCGGCC AAAGAGGCCT ATCCACCCGC CTCAGCCTCC CAAAGTGTG GGATTGCAGG      60
TGTGAGCCAC TGC GCCTGGC CTAAACAAAC TTTTGA AAA GCTGTTTCTA AAAGATTTCCT    120
TAAATTCAGA TATGACAGCT AATTACCTCA TCATAAATTA CTTTATACT AATTGTTTCC      180
AGGGTTTTAG AGTAGTTGAA TGTTTATTTT ACAAGGCACC CTAAATTCTA TAGAAATAAA      240
ACCTCAGATG AGTCTCCTC TTAGAGTGTT ACAATGAATG GGAGTTTACA ACTTTTATGT      300
GTCATGTTTC CAACAGCTAT CTCGAG                                           326
```

(2) INFORMATION FOR SEQ ID NO:1291:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

```
GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCTG CTTCTGCTC GTCCAGTACA      60
TTGGCTTTGA AATATACTTG AATTGTGGA GGCAGGGTGT AGAATGACAA AAACAAACAA      120
AAACCCACCA ATACAGACCA AATTGGGGTA CACACGGACA GATTGGTTT AATTTTATT      180
TAATTTTGA GTTCTATGA GAAGAAGAAT GAGGAGAGAC AAAAAAGGG AAGAGTGAGA      240
GATAGTATAT TTAGGGTATG ACAAATCAGG GATGGCTCGA G                                           281
```

(2) INFORMATION FOR SEQ ID NO:1292:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

```
GAATTCGGCC AAAGAGGCCT AATTAACTA AATCTTAGGG ACTTAGGGAT TAAACTAAA      60
TCCCCACCAC ATCTGATTTC CCCTCCTCG AAATACCAAT AGTACGTGCA ACACAGACTT      120
GTAGCTCAGA GGTGCGATGC TGTTTCAAAT TCTTGGGATA TGCATGTTAC TTTT TTTTAA      180
AGAAGTGGTA TATCAGACAC CTGAAGGTCA AGTCTCTCTG TGCCACCAAC AAATCTCTCGT      240
GACCTTGAGC CCCTCCTCTC AATTCCTCTT CGGTAAAAGA AATACCTCAC AGTGGCTGTG      300
CAATCACCAA ATAGGAACTA CAGGTGGCAT TATTATCTT TTGCCCTTGT GTAAGAAAAG      360
ACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1293:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 234 base pairs

TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

GAATTCGGCC AAAGAGGCCT AGGATATTTT AAATTTTGTT AATTTTGTTT CGTGGTCTCT	60
GCCTGAATAG ACAGGCACTT GCCTGGAACG TAATACTGTT TCACTGCCTC GTTTTACCT	120
GTTTAATCTA GAACCAAATT GTGTCAATGT GTCAGCCCGT TTGTGCTTTT ATAACAAAAT	180
ACTACAGACA GTAATTTATA AAGAATAGAT ATTTATTTCT TCACAGTTCT CGAG	234

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 562 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

GAATTCGGCC AAAGAGGCCT ATACTGATCC TCTCCCCTTG TGCATCACTT TTTCAGTGCA	60
GATATCTTGT AGCTCCGTGT CTAGAGGTAG CCAAGGTATC CTCCTAGCTT GCCTTCTTGG	120
TTTTATACAT GCTTCAGTAT GTAAGACAGC TTGTAGTCCA AACTCATGAG ATGACTATTC	180
TGCCTGCCCC ATCTTACCTC AACAAGTGAG CCTGCATGCA TGTGCTCCTC AGTCTAGTCC	240
CAGGATAGGA GGTAGGGGTC TCACATCGAC CTCGAAGTTCA TATGACTTTT TCTAACTCAC	300
CTTTACCACA CAGCCCCTAC TGTGGGGCTT ATAAAGTGTC ATGGAGATTT GTGAAGTCAA	360
TGTTTCCTTT CCTTGTTTAT GTGCTTTATA AATTAGGTCC CTCTCCAAA CTTTTCATC	420
ATCCTAACT GAAACACTAT GCCCATGAAG AAGTCATTAA ATAAAAGACT GATAAATTTG	480
ACTCCATAAA AATTAAAATT TTCTATATAG GAAAAATGC CTCAAAGTCA AAAGTCAATC	540
ACCAAAGTGG GAGTTACTCG AG	562

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 322 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

GAATTCGGCC AAAGAGGCCT AGACACCCGT CATTGCAATT TATATTTTAA CAAAGGCTTC	60
TGATCCTAAT TTCAGGAAAT AGCCTCTAAA CTCATCTATT AGTCCCAAAT TCTTTACCCA	120
TTAAATCTGC TATTTTATGC CTCCTATATT CTTACCTTCA GATGTTGAGA GGTGGGGCA	180
TAAAACTTTG CAGCACGTCT GCAGTCTTCC CTCTAGAGTG AACTTGATCC TGCTGTTGT	240
TCTTTTATT CTCTCAAAG TTAATCATA TTCCAGCATT CATGGTATTT CTCCAGCTTG	300
TCCTCCACAC TCACCCTCG AG	322

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 313 base pairs

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

GAATTCGGCC AAAGAGGCCT AAGCTGTTCG GGTACTTGTC AAAAATGGCT TCCAAATATA	60
TTCCTTTTAA TACAGGATGT GAAAACACTT CCTAATAAAT TCCTGCAAAA TTAGATGATA	120
CTGTATGTAC TTCTGAAGGA CAGACAAGAA AGTAACCTAA GACCAAAACA ATAGAGGTCT	180
CCTACTACTG GGGAGAAGGA GGATTATCAA GAATAGAGGA AAACAGAGCC TGCCTAAGAC	240
TAATACTGGT CTAGAACAAA AGAGAAAGCT CAATTCCTAC CACCACAAAG CTAAACAGCA	300
TCCAAGGCCT CGG	313

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 340 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

GAATTCGGCC AAAGAGGCCT AGATTTTGT CTTTAATTCT CTGTGTTTTT AGNACCTTGC	60
GATTTTAA GTATATTAA CTTTTCTCCT AGATGTTTAC CTTTGAAATA CCTCTCTCTC	120
CTAATGATTT AGACCTATGT GTCCAACTAC TTTTCGGACA TGTTTCCCTA GATGTCTCAT	180
GGTAACTCC AATTTAACAT TTCCAAAGTT AAATTTATTT TATTTTACCA GACTTGGGTT	240
TTTTGTTTT TTTGTTTTG CTTTTCCCT TTTTAAGATA TCCTGGAGTC ACCAGAATCC	300
TATCTAGATA CCCTTGGTTA GAGTTGCTCA TGATCTCGAG	340

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 370 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

GAATTCGGCC AAAGAGGCCT AGCTTCTTCT GAGAGAGTCT CTAGAAGACA TGATGCTACA	60
CTCAGCTTTG GGTCTCTGCC TCTTACTCGT CACAGTTTCT TCCAACCTTG CCATTGCAAT	120
AAAAAAGGAA AAGAGGCCTC CTCAGACACT CTCAAGAGGA TGGGGAGATG ACATCACTTG	180
GGTACAACT TATGAAGAAG GTCTCTTTTA TGCTCAAAAA AGTAAGAAGC CATTAAATGGT	240
TATTCATCAC CTGGAGGATT GTCAATACTC TCAAGCACTA AAGAAAGTAT TTGCCCCAAA	300
TGAAGAAATA CAAGAAATGG CTCAGAAATA GTTCATCATG CTAAACCTTA TGCATGAAAC	360
CACGCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:1299:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 342 base pairs  
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

GAATTCGGCC	AAAGAGGCCT	AGTTGGAGTT	TGCTGATAGA	AGGACTAGCT	AAAGGCGTCA	60
CTGCAGGAAT	TACAACTGA	AGAGGACTCT	GTTGGACTGT	TTTTTTTTC	TTTNTCTTT	120
TTTAAAGAAA	AACCCATTTT	TTTCCTTAAG	GACTTACTAG	CCAAAATTC	TTAAACTTCG	180
AGGACTCTAC	TAGCCATGGC	CGAGCCATTC	TTGTCAGAAT	ATCAACACCA	GCCTCAAAC	240
AGCAACTGTA	CAGGTGCTGC	TGCTGTCCAG	GAAGAGCTGA	ACCCTGAGCG	CCCCCAGGC	300
GCGGAGGAGC	GGGTGCCCGA	GGAGGACAGT	AGGCATCTCG	AG		342

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 217 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

GAATTCGGCC	AAAGAGGCCT	ATCTAGACCT	GCCTCGAGTT	GGTCTATCCT	ATGCTTTATA	60
CGCTAAGAGA	GACCACATTT	TATTGCTGT	GTCCAACACA	GGAATTAAAT	AAATGTTGAT	120
TTTAGGAATG	CCTTCAAGTT	CCTCTTATC	TTTATATCTC	TTTCTACTTT	GGCTTCTCT	180
CTCTAGAGAA	GTTCTAGATC	TTTCCCAAC	TCTCGAG			217

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 237 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

CCTTCGGAGA	GAGGCACGCC	CGGCCCGGAC	AGTTCAGGCT	CTCTCGGCTC	CGGGGAGTTT	60
ACTGGCGTGA	AGGAGCTTGA	TGACATCAGT	CAAGAGATTG	CCCAGTTACA	AAGAGAGAAA	120
TATTCAGTGG	AACAAGACAT	TCGAGAAAAG	GAAGAGGCAA	TCAGACAGAA	AACCANCGAG	180
GTGCAGGAAT	TACAAAATGA	CCTAGACCGG	GAAACAAGCA	GTTTCAGGA	GCTCGAG	237

(2) INFORMATION FOR SEQ ID NO:1302:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 379 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

GAATTCGGCC AAAGAGGCCT ACAAAGGAGA CCCTTCATAT CAAAATACAG TTATCAAAAT	60
ATTTTAAAGT TATATATAAT TATGTGCTTC TNTACTAATG TCTTAAATAA TGAGATCAAA	120
CAGCAGATCT TAAAAACTGT CATAATATTT GGAGTAGTGA TGGGCATAAA AGTTATCTCTG	180
AGATCTCCGC AGGAACTGTA ATGTGATATG AAAAAGTCTG TGACTCCTGT TACCAACAAA	240
GTCTCAAGTC TCAAGTCTAC TACTAGGGTA TGTACCTAC ATCCCTAAG TGAGGGAAAT	300
GTTATGTTTC AGTTGAGGCG AAATGATGGC AATGATGTAA TTTTTTCTC TTCAAGTTC	360
ACAGCCCCC CCGCTCGAG	379

## (2) INFORMATION FOR SEQ ID NO:1303:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

GAATTCGGCC AAAGAGGCCT ATTTGCTGA TTTCTTCTTA CATATGAATT ATGTGGGTAT	60
GTTTAATTTT AAGTTAGGAT AAACAGGCGT TAAGTAAGGG TTAGTGTAGA ATTTAAGCAT	120
GTCAATTTTG TAATCTCATC GGGCCTTGAT TTCATTAGTT TAGGCCCTCC ATTTTATAGA	180
TAGTGGTTCC CAGACTTCCC GGCTGCCTCA ATCTCCTGGG TCTTTGTAA ATAACCTTAA	240
GCAAGCTCAT TTCCCCAGT GTGTCAGTT CACAGAAAGC TCGAG	285

## (2) INFORMATION FOR SEQ ID NO:1304:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

GAATTCGGCC AAAGAGGCTT AGTTGGTATC TGCCCAGGGA TAATTGCTCT TAGGGTAAGA	60
CTTTTAACAT GTAAGCCAGC CTGTCAAAAG TGCACCTAAA AGTTCTCTTT CAGTCATTTT	120
CTGAGTTACT GATAGGAACA TAGGTACTGT GTGAATCAGA TCTGAGAGGA TTATGAATGT	180
TATAGAATGC CTTTGTAG GGAATTTAAG CCCAGAAGAA GTTGGGAAAG TGACAGATTT	240
ATATAAATGC GAGTGACAAA ACCAGTTAAA ATGTTCTGAC TCAACCTGAA ATATGTTGGA	300
CTATATAATA AATATAATAT TGTGAGATAT TCTGAACCTAG ACTCAACTCG CTCGAG	356

## (2) INFORMATION FOR SEQ ID NO:1305:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 489 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

CTCGAGTACG TAGCGTAGAA ATAGAGAATA GGTCAACAGG TTGGAGGTGG AGTGTTTAAG	60
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```

GACAAAGTTA TGAAGTT TTTGGTTTG AAAAATTAGA GGATAGCT GTACCATAGA 120
CAAAATGGATA AGTTCGGAAA AAATCTTTT TTTTTTTTT TTTTTTTTAA AAAAAAGCC 180
ACGGTCTCAC TATGTTGACC AGGCTACCAG GCTCGTCTCA AACTGCTGGC CTCAAGCAAT 240
CCTCCACCT AGGTCTCCA AACTGCTGGG ACTACAGGCA TGAGGCAGAA TCGCCCGAAC 300
CCAGGAGGCA GAGGCTGCAG CGAGCCAAGA TCACGCCACT GCACTCCAGC CTGGGTGACA 360
GAGCAAGAAT CCGTCTCCA AAAAAAAGA AATAAATAAA ATAAAAAGG GTGTTCCATA 420
GGGGTGATGG GGAGGATGAA ACGTCATCAA ACAAGTTTAA GAAACATCTA GGCCTCTTG 480
GCCGAATTC 489

```

## (2) INFORMATION FOR SEQ ID NO:1306:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

```

GAATTCGGCC AAAGAGGCCT AAATCAAT AAAGAAGAAA TACAGGAAAA GGAGACAATC 60
ATTGAAGAAT TAAACACAAA AATAATAGAA GAAGAAAAGA AAATCTTGA GCTAAAGGAT 120
AAATTAACAA CTGCTGATAA ATTACTAGGA GAATTACAAG AACAGATTGT GCNAAAGAAC 180
CAAGAAATAA AAAACATGAA ATTAGAGCTG ACTAATTCTA AGCAAAAAGA AAGACAGTCT 240
TCTGAAGAAA TAAAACAGTT AATGGGGACA GTCGAAGAAC TTCAGAAGAG AAATCATAAA 300
GACAGCCAAC TCGAG 315

```

## (2) INFORMATION FOR SEQ ID NO:1307:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

```

GAATTCTAGA CCTGCCTCGA GTAAAGCCTG TAGGTAAAAT GGAGACAGAT TTGAAAGAAA 60
TTAGAGAAGA AATTTCCTCA AGGGAAAAGG TGCTAGCAGA GATCAGTGCT ATAAGGGAAA 120
AGGAGATTGA TTGAAAGAA ACTGGAAAAA GAGACATTCC CATGATGGAG AAAGTATCAG 180
GAAAGATGGC TGTGTTGAA GGACATCTCG AG 212

```

## (2) INFORMATION FOR SEQ ID NO:1308:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

```

GAATTCGGCC AAAGAGGCCT AGAAATATTA ATGAAATCGC TGAAAAGCTT TGCCTTCGAG 60
AGGCCAGAAG CCTCGCGGAA TGTCTGCAAG TCCTAAAGACG CGTGTGGGTT GTGCCCTGAA 120

```

GTGCCGT	GCAGGCGCGT	GCGGCCGGGC	CGGCCTGTGC	GTGGCCTT	TGCCTTCTTC	180
CCTTTCTTCC	TGTTTTCTGT	TTTTTTAATT	TGGGGACTGG	TGAGGGCTCG	TCCATGTCCT	240
TTGTCAGGTC	TTCTTGCTCC	TCCCCTCGAG				270

## (2) INFORMATION FOR SEQ ID NO:1309:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

GAATTCGGCC	AAAGAGGCCT	AGTCTTATAC	CTGGGATGTA	GCTGACAAAT	TATTGCATTG	60
TAAAATGAGT	CACGTGAATC	ACGGAAGCTT	TAAACTTTT	CTTTTTATAG	CCCTACCTGA	120
ACCCATCCTT	CCATCCCTCC	AAAAAATTTA	CCAGTAAGT	GTTTCTTATA	AATTATTATA	180
ATACATTTTA	TGTCAAGTGT	ATGTAGAAGT	ATTATAAGTA	GTATTAATGT	GATTATAAAA	240
GTAGTAAGGC	TAAGTACATG	ATAACATTTT	CTATATATAC	CAAGAGAACA	TTTAAATGT	300
TTCATATACT	GTTTCAGAAA	ACTCTCTTAC	TTGTTATTTT	GTATTGGCA	GACAGTCTGG	360
TCAGTTGTGT	TAATGGTGGA	CTCGAG				386

## (2) INFORMATION FOR SEQ ID NO:1310:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

GAATTCGGCC	AAAGAGGCCT	ACCATTTTAG	CCTGCAGGCT	TCCTTGGGCT	TTCTCTGTGT	60
GTGTAGTTT	GTAAACACTA	TAGCATCTGT	TAAGATCCAG	TGTCCATGGA	AACATTCCCA	120
CATGCCGTGA	CTCTGGACTA	TATCAGTTT	TGGAAAGCAG	GGTTCCTCTG	CCTGCTAACA	180
AGCCCACGTG	GACCACTCTG	AATGTCTTTC	CTTTACACCT	ATGTTTTTAA	GTAGTCAAAC	240
TTCAAGAAAC	AATCTAAACA	AGTTTCTGTT	GCATATGTGT	TTGTGAACCT	GTATTGTAT	300
TTAGTAGGCT	TCTATATTGC	ATTTAACTTG	TTTTTGTAAC	TCCTGATTCT	TCCTTTTCGG	360
ATACTATCTC	GAG					373

## (2) INFORMATION FOR SEQ ID NO:1311:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTCGGCC	AAAGGAGGCC	TAAACAGATA	TTTACTGAGC	ATTTACCATG	TTAGTAACC	60
AGGGCCCTGG	GAATATAATA	GGAGAAGGCA	GATGAGATCC	TTGCCTTCAC	CAAGCTTATG	120
TTTTTCTATT	TTAAGTAAAA	TTTGCCATGA	CAAAATTTCT	ATCAGCGGAA	GAGCCAGTAA	180

```

CTCTTATTGT      GGTTTT ACCCAGTTT AGAAAAGGAA AGTAG      AA CTCTTGGTTC      240
CTTGGTGTGT GTTTTGTGT GTTCATTCT AGTACTGTC TATGTCTTTG GGGTAATTTT      300
TGATTTAGAA TTTGTAGAA ATTACTCGC ACAGTGTAGT TGAGGTGAAT ATAGGCAAGA      360
AGGCTTAGGA AGCCTACAAC AAAGGAATCT GACACACTCG AG      402

```

## (2) INFORMATION FOR SEQ ID NO:1312:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

```

GAATTCGGCC AAAGACGCCT AATTGAATTC TAGACCTGCC TCGAGTTGGA CCCTGAGTGT      60
ATCACTCCCA AGTGTGTACT ATTTATACAC AGCAGTTTCC AATGTACTCA AATCAACCTC      120
ATGTTCTTTG CTGTAGTAAG CTGAATGAAC ATGACTCTTG AATCACCTTA AATATGCTTG      180
ATAACATGTC AGGATTCAGA ACAGCAAAAA AGAAAGCTTT AAAGGAGAT ATGCTGGGCT      240
CATTCACATC AAACGTGCAGG GGAAACCTGG TTTATGTCCC ATAGCTACTA GAATTCCTAC      300
ACTTGGCCAG CTTATTTTAA TAGACCATT CTCAACTACT CTAGCTGTTC TGTCTAGTTC      360
TAAATAAAAA GCTAGGTAGT TGGGTACTAA AAGGCAAATA TGAATATATC AGTGGCTCTG      420
TATCATCTGC AGCAGTGGT CTAGTGTGA TTCCTGGACA GGCAGCACAA GCATCATCAG      480
GGAACCAAGT GGAATGCAA ACTCTGGGGC GCACTCGAG      519

```

## (2) INFORMATION FOR SEQ ID NO:1313:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

```

GAATTCGGCC TTCATGGCCT ACGAGGACGT GAGCAGATAT ACCAGCCCAG TGAACCCAGC      60
TGTCTTCCCC CATCTGACCG TGGTGCTTT GGCCATTGGC ATGTTCTTCA CCGCTGGTT      120
CTTCGTTTAC GAGGTCACCT CTACCAAGAC ACTCGAG      157

```

## (2) INFORMATION FOR SEQ ID NO:1314:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

```

CTCGAGTTCA CTACCATGAC AATCATTAA TAATTTGGTT TCTCTAGTGA GGTTAGTTGC      60
TTTCTTCCCT TCCTCCAGCA TCTGACCAAG GTCTGATTCT ACAGCTATTT GGGAAACAGT      120
AGTTTCTGGT GACATAGCTG AAGACCCTGA TGCTGTCATA GTCTGAATTC CAGAACTTT      180
AGAATCTTGA GTTTCAGTAT CAGTTTGCTT TTCAGTAACA GGTTCCTT CTTGAAATAT      240

```

```

TAATTTGTCATTACCAA ACATGTCCAG TTTTTCACCG GTCAGATG CAGCTGGAGA 300
CAAACCTGTTA TCTTGGAGCT CTGTGGGTAG ATTAGCTTCC TCAGTAGGAC TGCCTTCTAC 360
TTTCAGTTCC ACATAATCAT CATCTTCCTC TTCCTCTACT ATAGATTTAT CCAAGAATTC 420
TGGCATCTCT GAGGCAGGTC TAGAAATTC 449

```

## (2) INFORMATION FOR SEQ ID NO:1315:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 411 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

```

GAATTCGGCC TTCATGGCCT AGTGAATAC TAGGATATTT GTTGGCAGC AATAGAGCGG 60
CAACACCCCTT CTCAGACTCG TGGTACTACC CGTCCTATCC TCCCTCCTAC CCGGCACGT 120
GGAATAGGGC TTACTCACCC CTTTATGGAG GCTCGGGCAG CTATTCGGTA TGTTCAAACT 180
CAGACACGAA AACCAAGACT GCATCAGGAT ATGGTGGTAC CAGGAGACGA TAAAGTAGAA 240
AGTTGGAGTC AAACACTGGA TGCAGAAATT TTGGATTTT CATCACTTTC TCTTTAGAAA 300
AAAAGTACTA CCTGGTTAAC AATTGGGAAA AGGGGATATT CAAAAGTTCT GTGGTGTAT 360
GTCCAGTGTA GCTTTTGTGA TTCTATTATT TGAGGCTAAA AGTTGATGTG T 411

```

## (2) INFORMATION FOR SEQ ID NO:1316:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 274 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

```

GAATTCGGCC AAAGAGGCCT ACATCCAACA AGAAGCCATA ACTTTATTTA TGATAGAAAC 60
AGTACAAATT TCAAACCAAG CTGCAGTTAC TCCTTTGAGA CACCAAAAAA AGTTGCCTCC 120
ATATGGTTAC ATTGTTAATT CCATAATCGC ATTTACAATA TCATTACTGT TGTTCCTCAG 180
GGCTCGGACT GCCTTTGCTC TCGACACATT TGCTTGTGAC ATGACCAATT CTATGCTCTT 240
AACTTCTACA CCTGTTTCAC TTCCTCTTCT CGAG 274

```

## (2) INFORMATION FOR SEQ ID NO:1317:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

```

GAATTCGGCC AAAGAGGCCT AGCGGAGGT GCAGGTCCTG GTGCTTGATG GTCGAGGCCA 60
TCTCCTGGGC CGCCTGGCGG CCATCGTGGC TAAACAGGTA CTGCTGGGCC GGAAGGTGGT 120
GGTCGTACGC TGTGAAGGCA TCAACATTTT TGGCAATTTT TACAGAAACA AGTTGAAGTA 180
CCTGGCTTTC CTCCGCAAGC GGATGAACAC CAACCTTCC CGAGGCCCTT ACCACTTCCG 240

```

GGCCCCAGC CTTCT GCGGACCGT GCGAGGTATG CTGCCA AAACCAAGCG 300  
 AGGCCAGCC GCTCCTCGAG 320

## (2) INFORMATION FOR SEQ ID NO:1318:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 226 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

GAATTCGGCC AAAGAGGCCT ATAATTTTTC CCATCATTTA CCCTGATAAT CTGCCTCTTC 60  
 TCCATTTCTC CTTCCCTTAC TACCTTTCTT TGAATTACTG TAACTGATTG GTCCCACCAA 120  
 AATTTTAAAG TACATGAAGT ATCTTCATG GTTCATCCTC TTGCCCCCTC CAGATGTCAA 180  
 AAAACTTTAT CTGCCCCCT TGCTCCACC CGATGGCCCA CTCGAG 226

## (2) INFORMATION FOR SEQ ID NO:1319:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 192 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

GAATTCGGCC AAAGAGGCCT ATGAAGCTTC TGAGTTCTGC GGCCTCACNT CTGAGAAAAC 60  
 CTCTTTGCCA CCAATACCAT GAANCTCTGC GTGACTGTCC TGTCTCTCCT CGTGCTAGTA 120  
 GCTGCCTTCT GCTCTCCAGC GCTCTCAGCA CCAATGGGCT CAGACCTTCC CCCCCTGGC 180  
 AAATCTCTCG AG 192

## (2) INFORMATION FOR SEQ ID NO:1320:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 210 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

GAATTCGGCC AAAGAGGCCT ATTTATTACA ACAGATCTTT TAATGACTAT TTTAACATA 60  
 AAGATTGTTG TTTGGGAAA CATCTATTCT CTTTGAACAT TTCCTAAAT TTTCAATGTA 120  
 TTAAATAACT GACAGAAATA AGTTCTGTGT TCTGTACAAA TTAAGGTCC CATGAATACA 180  
 TAACCCCCAC CCCCCCCCCG TCCACTCGAG 210

## (2) INFORMATION FOR SEQ ID NO:1321:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 156 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

```
GAATTCGGCC AAAGAGGCCT ATTTTTTTT TGATCTATGA ATGATTTATT AGATAAATTC    60
TATACATACA AAGTACAGAT TCTTCATTTA GCATTGATTT ACTTCTTAGT TTTCATCTTT    120
CTGACTATCC AAACCGCTGA CTCGAGGCAG GTCGAG                                156
```

(2) INFORMATION FOR SEQ ID NO:1322:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 199 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

```
GAATTCGGCC AAAGAGGCCT ATTTTGGCTA CACTATGTGA CAGAACAGCT TATAAACTA    60
GGTATGAACA TTAAGTGTGA GTGTAAACAG TAGGACTACC ACTTGTCAAA AGTTTTAAAC    120
ACTTGAAC TGAACTGGTAC TGTTATTCA TCATTTTCAT TGTTTTCTAT TTCATCCCCC    180
CCACACCCCT CTGCTCGAG                                199
```

(2) INFORMATION FOR SEQ ID NO:1323:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 209 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

```
GAATTCGGCC AAAGAGGCCT ACACGGTACC AACACAACT CAAGCATCGA CTCCTCCGCA    60
GACCCAGACC CCTCAGCCGA ATCCTCCTCC TGTGCAGGCC AGGCCTCACC CCTTCCCTGC    120
CGTCACCCCG GACCTCATCG TCCAGACCCC TGTCATGACA GTGGTGCCTC CCCAGCCACT    180
GCAGACGCCC CGCCTCTAG CGCCTCGAG                                209
```

(2) INFORMATION FOR SEQ ID NO:1324:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 229 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324: ,

```
GAATTCGGCC AAAGAGGCCT AATCACTACT CACAGTAACC TCAACTCCTG CCACAATGTA    60
```

CAGGATGCAA GTGTCTT GCATTGCACT AAGTCTTGCA CTTGTGAAA ACAGTGCACC 120  
 TACTTCAAGT TCTACAAAGA AACACAGCT ACAACTGGAG CATTTACTTC TGGATTTACA 180  
 GATGATTTTG AATGGAATTA ATAATTACAA GGCTCCAAAC TCACTCGAG 229

## (2) INFORMATION FOR SEQ ID NO:1325:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 204 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

GAATTCGGCC TTCATGGCCT AGCTTTCCCA ATCTCTCGGA GCATGCACAT CAGGGCCACG 60  
 TTGGTCTTCC CAGCACCAGT AGGAGCACAC AGCAGCAGAT TCTCATCCGT CTCAAGGGCA 120  
 GCACGGTAGA GCTTACTCTG GATCCGATTC AGTGTTTTGA AGCCCTCAAA CCCAGCCTGG 180  
 ATTGAATTCT AGACCTGCCT CGAG 204

## (2) INFORMATION FOR SEQ ID NO:1326:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 192 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

GAATTCGGCC AAAGAGGCCT AGCCGATCTC CAGCCCAAGA TGATTCCAGC AGTGGTCTTG 60  
 CTCTTACTCC TTTTGGTTGA ACAAGCAGCG GCCCTGGGAG AGCCTCAGCT CTGCTATATC 120  
 CTGGATGCCA TCCTGTTTCT GTATGGAATT GTCATTCCCC CAGAGCGTCT CGAGGCAGGT 180  
 CTAGAATTCT AG 192

## (2) INFORMATION FOR SEQ ID NO:1327:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 222 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

GAATCTAGA CCTGCCTCGA GAATAGGATA GCATTTAGTA ATTCACTTAA CAATTTTAT 60  
 TGAATATCTA TTGTTTATT GAATATGCTT GTTCTCACCT TAGCACATTT GCCCTTGTTT 120  
 TCCCTGGGAT ACTATTCCCC TAGATCTGAT TTTTGGTTTT TGTGTTTGTT TGTTTTAATT 180  
 CTCTGCCATC TTTCTCCAGT CAAATGTCAC CACACTCTCG AG 222

## (2) INFORMATION FOR SEQ ID NO:1328:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 267 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

```
GAATTCGGCC TTCATGGCCT AAGAAATGTT CACTTTTCCA ACTTAAAAGG ATTTTAAAA    60
ATACAAACAT AATTGACCTA CCTGGTTCAA AGAACAGAAG TGAGGAGAAC TTGCTTAAAG    120
GTATTGATGT TATATTTTCT CTGACTGAG TGCTTGAAAA AAAATTTTAT TGAACATATG    180
TTCTCCTTCC GTGGCTTTT TGTCTTTGCT TTTTGTGTT GTTTGTGTT TTTTCTTT    240
GAGATGGAGT CTCACTCTCT GCTCGAG    267
```

(2) INFORMATION FOR SEQ ID NO:1329:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 267 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

```
GAATTCGGCC TATGGCCTAA AAAAAAAG AAAGAAATAG GATTGATACA GGTATAGATA    60
CATAGATACA TGAGAAGGGA TTTATTATGG GAATGGGCTC ATATGATTAC AATGATTACA    120
GAGGCTGAAA ATTCCACAA TAGGCCATCT GCAAGCTGGG GACCAGGGAA GCCATTATG    180
TGGTACAGTC TAAGCGTCAA TCAGGAAAGC CAGTTGGGTA ACTCTCAGTC TGCAGCTGAA    240
GGCCTGAGAC CCGGAGGTCC ACTCGAG    267
```

(2) INFORMATION FOR SEQ ID NO:1330:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 267 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

```
GAATTCGGCC TATGGCCTAA AAAAAAAG AAAGAAATAG GATTGATACA GGTATAGATA    60
CATAGATACA TGAGAAGGGA TTTATTATGG GAATGGGCTC ATATGATTAC AATGATTACA    120
GAGGCTGAAA ATTCCACAA TAGGCCATCT GCAAGCTGGG GACCAGGGAA GCCATTATG    180
TGGTACAGTC TAAGCGTCAA TCAGGAAAGC CAGTTGGGTA ACTCTCAGTC TGCAGCTGAA    240
GGCCTGAGAC CCGGAGGTCC ACTCGAG    267
```

(2) INFORMATION FOR SEQ ID NO:1331:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 494 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

ATGGATTGGT TGCCGTGGTC TTTACTGCTT TTCTCCCTGA TGTGTGAAAC AAGCGCCTTC	60
TATGTGCCTG GGGTCGCGCC TATCAACTTC CACCAGAACG ATCCCGTAGA AATCAAGGCT	120
GTGAAGCTCA CCAGCTCTCG AACCCAGCTA CCTTATGAAT ACTATTCACT GCCCTTCTGC	180
CAGCCCAGCA AGATAACCTA CAAGGCAGAG AATCTGGGAG AGGTGCTGAG AGGGACCGGA	240
TTGTCAACAC CCCTTTCCAG GTTCTCATGA ACAGCGAGAA GAAGTGTGAA GTTCTGTGCA	300
GCCAGTCCAA CAAGCCAGTG ACCCTGACAG TGGAGCAGAG CCGACTCGTG GCCGAGCGGA	360
TCACAGAAGA CTACTACGTC CACCTCATTG CTGACAACT GCCTGTGGCC ACCCGGCTGG	420
AGCTCTACTC CAACCGAGAC AGCGATGACA AGAAGAAGGA AAAAGATGTG CAGTTTGAAC	480
ACGGCTTACT CGAG	494

## (2) INFORMATION FOR SEQ ID NO:1332:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

GAATTCGGCC TTCATGGCCT AGCTGATATT ATTTCTGAGT TTTTGCTTAT TTGCTTTCTA	60
CATAGAATCA ATAAAATTGA CAACTAGCAT TGCCTATATA TGCAGGTGTG ATACTATTCA	120
GGGTACTAGT ATATTGGCCA CTCATTATGA AACTTTTCAGG TCCTCATATA TTTTCTTTTA	180
TTACAATGAT CTACTTATTT CTGATAAATA TTGGATTCAAT AGAGGCTAAA GGGCTGGGAA	240
AGGAAAACAT TCGTGACTAC TTACAACCAT TTGATACGAG TTGTGTCAAT ACAGACCTCA	300
CACAGCAGCA CCTCGAG	317

## (2) INFORMATION FOR SEQ ID NO:1333:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

GAATTCGGCC TTCATGGCCT AGCTTTTCTA GCCTTTCTCA AAGAAATGCA AACAGCTTGT	60
GTTTTTTCCC CTGGGTCCCT ATTGTACCTA CTTTGTGTTG ATGGTCTCTC TGTCTCCCAT	120
GATGCCAGTG AATGTAGCAG TTTCTCTCCA CTTCCACCAG TGCCTGGGGA AAATTTGGTA	180
TTGGCAAATT TGAGTTCTGC CTTTTTGAG CTTGCATTGC TGGATTCAAC CTTAGGAGCC	240
TCAGTTACCC TCGAG	255

## (2) INFORMATION FOR SEQ ID NO:1334:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (x) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

GAATTCGGCC TTCATGGCCT ACTCTTCCCC AAAAGGAAGC ATTTACTCTG CCTCTTACAG	60
TGCAGAGTGA CAGAATGGAC ACAGAAAAAC ATAGGTGGGT CAGAACAGAT CTCAGTTTGA	120
ACCCAGTAGC TACTGGCTAT AGGGTCTCTG GGCAAGTGAT TTGACCTCTC TGCCTCTGT	180
CTTCTCAAAT GTAAAAACGG GTCAGGCGCA GTGGCTCATG CCTATAATCC CAACACTCCG	240
GGAAGCCAAA GTGGGAGGAC TCTCGAG	267

## (2) INFORMATION FOR SEQ ID NO:1335:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

GAATTCGGCC TTCATGGCCT ACAAATGTAA AAATAACTGG GCACTGAAGT TTTCTATCAT	60
ATTATTATAC ATTTGTGTG CCTTGCTAAC AATCACAGTA GCCATTTTGG GATATAAAGT	120
TGTAGAGAAA ATGGACAATG TCACAGGTGG CATGGAAACA TCTCGCCAAA CCTATGATGA	180
CAAGCTCACA GCAGTGAAA GTGACCTGAA AAAATTAGGT GACCAAACTG GGAAGAAAGC	240
TATCAGCACC AACTCAGAAC TCTCCACCTT CAGATCAGAC ATTCTAGATC TCCGTGAGCA	300
ACTTCGTGAG ATTACAGAAA AAACCAGCAA GAACAAGGAT ACGCTGGAGA AGTTACAGGC	360
GAGCGGGGAT GCTCTGGTGG ACAGGCAGAG TCAATTGAAA GAAACTTTGG AGAATAACTC	420
TTTCCTCATC ACCACTGTAA ACAAACCCT CCAGGCACTC GAG	463

## (2) INFORMATION FOR SEQ ID NO:1336:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

GAATTCGGCC TTCATGGCCT AAATTCTAGA CTGTCATCGA GGGCGGCGAC CTGATGATGA	60
CCAGCTTCGA GAGGATGCTG TCCCAGAAGG ACNTGGAGAT CGAGGAGCGC CACAAGCGCC	120
ACAAGGAGAG GATGAAGCAA ATGGAGAAGC TGAGGCACCG GTCCGGAGAC CCCAAGCTCA	180
AGGAGAAGGC GAAGCCGGCA GACGACGGC GGAAGAAGGG TCTGGACATT CCTGCTAAGA	240
AACCGCCGGG GCTGGACCCT CCATTAAAG ACAAAAAGCT CTCGAG	286

## (2) INFORMATION FOR SEQ ID NO:1337:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

```

CTCGAGGGTT GTTTGGC TGGTTGTGTG TACACAGTGT ATACAGTTG AGTTGTACAG      60
AAGCCCAAGA AAGAGCAAGA GACAAAGGGT AGTGGGAGCA GGGGGTGGGG CGGGGGCGAG      120
AACGGGGAGG AGGGGAAAGG AGACCGATAA AAAATAGAAC CACATCCAGA CAACAATGGG      180
GGATGGGCAG TGGGTGGGGG CCAGACACAG ACAAATCGCC GTAGAAAAGG AGTGGGAGGG      240
GCAGAGAGTA GAGGG                                     255

```

## (2) INFORMATION FOR SEQ ID NO:1338:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

```

GAATTCGGCC TTCATGGCCT AAGAGAAAGC ATTTTAACTT TTATAGTAAA CAATAAAAAA      60
GCCTCATAAA GCTTCTCACA ACAACTTCAT TCGTTTCAGA AGTTAAGATA TATTCCTTAT      120
GAATACCAAC ATTGTGACAT TTGTGTTGCC AATTATTTTC TCTGGAATCA TTCTTTTAAC      180
TTCACCTCCT GTTGTGTTGG AAGACTTTCG AGAGAACATA TTTTAAATAG GCTATAATCA      240
CACGGGCAAC AGACTCGAG                                     259

```

## (2) INFORMATION FOR SEQ ID NO:1339:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

```

GAATTAGAAG TATTGTTTAA TAAGTCCTTT TTTTCTACTC AACATTAAGT AGTAATCAAC      60
TTTTACCTCC GCCAGTTTTT CTGCTTTTTT GCTGGTACGA TCTCTCTTTC TAAATTGAAT      120
CAAAGACCTA GGTGGAAC TGAACTTAGG AGGGAAAGAC AAAATGAGGC TTGTTTCATGA      180
TCAAATTCTG TGTACTCTAG TTGCTTCTTT CCCTTGGAGT GACAGGTACT TTTATATCCA      240
GGATGATTAC AGTGATGACA TCCATTCTTT TTTGGGGGCC CTCGAG                                     286

```

## (2) INFORMATION FOR SEQ ID NO:1340:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

```

GAATTCGGCC TTCATGGCCT AGGAATCAGT AGTGACTTTT GATTGTATTG TATAAGGTAT      60
TTTCAAATAG AAAAGCAGGT AGCAGAAATA CTAAAAGAAT TTTTGTCTTT AGTGTAAGT      120
AGATAATGAG AGGTAGATGC CTAATTTCTT AGTTTCTTTT TAAAATTAT GCTAAAATAT      180
ATCATATCAT TTACCATTTT GACTATTTTA AAAGTATACA GTTCCGTGGC AAGTCTCGAG      240

```

## (2) INFORMATION FOR SEQ ID NO:1341:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

```
GAATTCGGCC TTCATGGCCT ACAAATTGT GTCTTTTTT TGGCAATGTT GTCTTGCCAA    60
TCCCATCCCT CCCCAGCTC TCCGAACAGC AGGATTTCCT AACGGCAGCT TGGGANAAG    120
ACCCAGTGGC AGCTTGGGGA AAAGACCCAG CGTCCGTTT AGAAGCAACG TGTATCAGCC    180
AACTGAGATG GCCGTCGTGC TCAACGGTGG GACCATCCCT ATTGCTCGGC CAAGTCACAC    240
TCGAG                                         245
```

## (2) INFORMATION FOR SEQ ID NO:1342:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 134 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

```
GCGATTGAAT TCTAGACCTG CCTCGAGACT GACGCCGCAC CATGACCCTC CTGCTGCTGC    60
CCCTTCTGCT GGCTCTCTG CTGCGTCTCT GTCCTGTAA CAAAGCCAAC AAGCACAAGC    120
CACC GCATCT CGAG                                         134
```

## (2) INFORMATION FOR SEQ ID NO:1343:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 381 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

```
GAATTCGGCC AAAGAGGCCT AAAAAGCTTC CAGCAGCAGA TGCAGAATTA CCTTAAAGAC    60
AACAAAACAG CCACTATTTT GGACAAATTG CAGAAAGAAA ATAAGTCTG TGGAGCTTCT    120
AACTACACAG ACTGGGAAAA CATCCCCGGC ATGGCCAAGG ACAGAGTCCC CGATTCTTGC    180
TGCATCAACA TAACTGTGGG CTGTGGGAAT GATTCAAGG AATCCACTAT CCATACCCAG    240
GGCTGCGTGG AGACTATAGC AATATGGCTA AGGAAGAACA TACTGCTGGT GGCTGCAGCG    300
GCCCTGGGCA TTGCTTTTGT GGAGGTCTTG GGAATTATCT TCTCCTGCTG TCTGGTGAAG    360
AGTATTCGAA GTGATGTCGA G                                         381
```

## (2) INFORMATION FOR SEQ ID NO:1344:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 486 base pairs
  - (B) TYPE: nucleic acid

STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GACCAGATGG	AANGGTCACC	GAACAGTTCT	GAGTCATTG	AGCATATAGC	TCGATCTGCA	60
AGAGATCAGC	CAATTTCCCT	TTCTGAGCCT	CGTATGCTGT	GGGGGTCAGA	TCCCTATCCT	120
CATGCTGAGC	CTCAACAAGC	AACTACTCCC	AAAGCAACAG	AAGAGCCTGA	GGATGTAAGG	180
TCTGAAGCTG	CGTTGGACCA	GGAACAGATT	ACTGCTGCTT	ATTCTGTAGA	ACATAATCAA	240
TTAGAGGCTC	ACCCAAAGGC	AGACTTTATC	AGAGAATCAA	GTGAGGCACA	AGTACAAAAG	300
TTTTTAAGCA	GATCTGTGGA	AGATGTTAGA	CCTCACCATA	CTGATGCAAA	TAATCAGTCT	360
GCTTGTTTTG	AAGCACCTGA	TCAAAAGACC	TTATCCGCTC	CTCAAGAGGA	GCGGATTTC	420
GCTGTAGAAA	GTCAGCCTTC	CCGAAAAGA	AGTGTTTCCC	ATGGATCTAA	CCATACGCCG	480
CTCGAG						486

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 243 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

GAATTCTAGA	CCTGACTCGA	GGTGCTGGAA	TTACAGATAA	AAGCCACCAC	ACGCAGCCCA	60
CATAAGTG	TTATGGGAGC	AACTAACAGT	TGGTTTGAG	GCAGCCTAAA	TAGGGGATGG	120
CAAGGTGGG	TTTTCCAAGG	TTTTCTAATC	TTCTATTTC	TTCTAGTGAG	TCTTCAGGTT	180
ATTATGACTT	GTGTTACCAG	ACTATCAACA	AAAGTGGGTA	CCTCTTTAAA	TCAGAGCCTC	240
GAG						243

(2) INFORMATION FOR SEQ ID NO:1346:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 294 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

GAATTCTAGA	CCTACCCCAT	CCACATGCAC	AGCCAGCTGG	ACCACCTTAG	CCTCTATTAC	60
TGCAGGTGTA	CTCTGCCAGA	GAATCCAAAC	AATCACACCC	TCCAGTACTG	GAAGGACCAC	120
AACATCGTGA	CAGCAGAAGT	CCACTGGGCT	AACCTGACTG	TCAGTGAATG	CCAGGAGATG	180
CATGGAGAGT	TCATGGGATC	TGCGTGCGGC	CATCATGGAC	CCTACACTCC	TGATGTCCTC	240
TTTTGGTCCT	GTATTCTCTT	TTTACCACC	TTTCATCCTC	CAAGCACCTC	CGAG	294

(2) INFORMATION FOR SEQ ID NO:1347:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 240 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

AGTTTCTCCA TTTTAGAATT TTGTTGTCCT CCTTAATCAT CTGCTTACCT AGTCATTACT	60
CAATCTGCAG AAAGTTCATA AAGGAAAAGT GCTGCATTGT TTTTACAAAT AACAGTTTGT	120
AGGGAAAATA TGACAAACCT CAACTATGGG AGTTGTCCAC AATACAAAT TTTGAAAAAA	180
CATTACATAG TGATAATATC ATACTTGTTT GTTAGGCTTG TTGCTTCCCC ACCACTCGAG	240

(2) INFORMATION FOR SEQ ID NO:1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

AAGTATTCTT TCAATTGCAA AGTGGCAACA GCTTTTATAT GCTAAGTCTG ACAAGTTTGC	60
AGTCAGTGAA TGATGGCACA TGGCACGAAG TGACCCCTTC CATGACAGAC CCACTGTCCC	120
AGACCTCCAG GTGGCAAATG GAAGTGGACA ACGAAACACC TTTTGTGACC AGCACAATTG	180
CTACTGGAAG CCTCAACTTT TTGAAGGATA ATACAGATAT TTATGTGGGA GACAGAGCTA	240
TTGACAATAT AAAGGGCCTG CAAGGGTGTC TAAGTACAAT AGAAATCGGA GGCATTATATC	300
TCTCTTACTT TGAAATGTT CATGGTTTCA TTAATAAACC TCAGGACGAG CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

GAATTCTAGA CCTGCCTCGA GACCTTTCTC CTGGTCTAAT GCTCCTTTTA AGGAAGGTGG	60
AAGGAACAAT GGAAGAATGC TTGTAAAGTA ATGTATTCTT AAGAACTAAA GCTATTTGCA	120
GAAGGGCCGA AGCTATGTGG TGTGAAAGGG AAATGAAGAG GGTGAGTTGG GGGGCTCGAG	180

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

GAATTC TAGA	CTCGA	GCTTCCCTG	ATCTTCTTC	ATCCCT	GACAGT GTTT	60
ACCAAGGATT	TCCCTTGGCC	TGCTTCTTC	TTTGACGCTC	ATTAAACCT	TTCCCTTCAG	120
TTGCAGACCT	CGTCTGCTTC	TCCCAGCTAT	TCCATTCTTC	AGTTGCTTGT	TAAACACGGC	180
CCACCATCAC	CTCAAAATG	ATGTTAAAT	GTCCTCATTT	TTTATCAAAC	TTAAGTTTCT	240
TCCTGTGGAT	CTGTGCTCA	GTACTCTCAT	CTTCCGATC	ACTCGAG		287

## (2) INFORMATION FOR SEQ ID NO:1351:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 335 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

GAATTCGGCC	TTCATGGCCT	AAAAAATCT	TTTTTAATGG	GTTTAAACA	CTAACTGA	60
GAATTTTCT	TGATCCCAT	CTGTTGGTTT	ACTTGATTC	TATAGCTGTA	TGGTAAATCT	120
CAAAATTAGG	TAATGTGATT	TCTTTTCT	TACTATTTT	ATTTAAAT	CATTTAGCAT	180
TCCTAGTTTG	ACTTCCATA	TACACTTAG	GATTGGTTT	TCTGTTTTC	AAATATTCTT	240
GCTTGGATT	TGATAGAAAT	TGAGTTAAAT	CTATAGATCA	ATGTGTGGA	AATTGGCATC	300
TTAGTCTTCC	AATTCATGAA	CATAGCCTAC	TCGAG			335

## (2) INFORMATION FOR SEQ ID NO:1352:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

GAATTCGGCC	TTCATGGCCT	ACGTATGAGA	CAGTGTATAT	GACACTGTAT	ATGTGTGAGA	60
CTGTGTGTGT	GAAACACTAT	ATGACACTGT	ATATGTGTGA	CACTGTATAT	GACACTATAT	120
GTGGAGACTA	TGTGTGAGAC	ACTATGTATA	TGTGACACTA	TGTATGTGTG	TGACACTGTG	180
AGAGACACTG	TGAGACACCA	AGACAGTATA	TGTATGAGAC	ACCCTGTGTG	TGTGACACAG	240
CGTGTGACTG	TGTGAAACAT	GCTCGAG				267

## (2) INFORMATION FOR SEQ ID NO:1353:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 202 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

GAATTCGGCC	AAAGAGGCCT	ACCCAGAACC	AGTTATACTG	AGGGTCCTGA	GATCTGCTAT	60
AACATCACCA	TCCTTTCAAC	CCAGAGGTGT	GTGTTTGTGG	GCCATTTCATT	TGGCCCTCAC	120
CACATCCTGC	CTTGATTGTC	TAGTTTATCT	TTTATTGTGC	TTGTTCTCC	CCCAACCTCC	180
TGCGCCATAC	AGACTCCTCG	AG				202

## (2) INFORMATION FOR SEQ ID NO:1354:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

```

GGTTTGGATA TCCTGAAAGA TCAATGGGCA GCTGCAATGA CTCTCCGCAC GGTATTATTG      60
TCATTGCAAG CACTATTGGC AGCTGCAGAG CCAGATGATC CACAGGATGC TGTAGTAGCA      120
AATCAGACGA GCAAAAATCA AATTAAAGTA GATCTTGTAG ATGAGAATTT TACAGAATTA      180
AGAGGAGAAA TAGCAGGACC TCCAGACACA CCATATGAAG GAGGAAGATA CCAACTAGAG      240
ATAAAAATAC CAGAAACATA CCCATTTAAT CCCCCTGATC TCGAG                      285

```

## (2) INFORMATION FOR SEQ ID NO:1355:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

```

GAATTCGGCC TTCATGGCCT AGTTATTTCG TCACTGTCGC AAACAGCAGG CAAAGTTTGA      60
CGAGTGTGTG CTGGACAAAC TGGGCTGGGT GCGGCCTGAC CTGGGAGAAC TGTCAAAGGT      120
CACCAAAGTG AAAACAGATC GACCTTTACC GGAGAATCCC TATCACTCAA GACCAAGACC      180
GGATCCCAGC CCTGAGATCG AGGGAGATCT GCAGCCTGCC ACACATGGCA GCCGCTTTTA      240
TTTCTGGACC AAGTAAAGAT GGGTCCGTGG CCCCACTCGG GTCATGTGCT CAGACAACAA      300
CTCGAG                      306

```

## (2) INFORMATION FOR SEQ ID NO:1356:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

```

GGAATGATGT CACTCACGTC CAGCAAAGCC AAAGAGCTGA AGGACCGGCA CCGGGACTTC      60
CCAGACGTGA TCTCAGGAGC GTATATAATT GAAGTAATTC CTGATACCCC AGCAGAAGCT      120
GGTGGTCTCA AGGAAAACGA CGTCATAATC AGCATCAATG GACAGTCCGT GGTCTCCGCC      180
AATGATGTCA GCGACGTCAT TAAAAGGGAA AGCACCCTGA ACATGGTGGT CCGCAGGGGT      240
AATGAAGATA TCATGATCAC AGTGATTCCC GAAGAAATNG ACCCAGAGGC TCTCGAG      297

```

## (2) INFORMATION FOR SEQ ID NO:1357:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs



TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

GTCCCGCTAA ACCGGCAGGC GATGAGAAAG GAAACCATCA CTAAGATGCT CTGGAGTACC	60
CGCACCCCTGT TGAATATCAC CAAGGAGCAG GTACCACTTG TGGTGGAGGA GTACCTGGAC	120
AATGTCAATG AGCATGACTG GAAGATGCTA CGAAACCGTA TGATGGACAT AGTTCAAGAT	180
GCCACTTTTCG TGTATGCCAC ACTGCAGACT GCTCACTACC ACCGAGATGC CGGCCTCCCT	240
GTCTACCTGT ATGAATTTGA GCACCACACG CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:1358:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 244 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

GAATTCGGCC TTCATGGCCT AGGGGAGCAT AAAAATACAA AAAACATTTG GCTTTATTCA	60
CAACGTATTT TGTGAAACT CAGGAATAAC TCTTTGAATT TTGGGGAAAC CAACAACATT	120
CTCAAAAACG ATGATAATCA ATTTTATTGT GCACCTCTGC ACCCTGCCTC CATGGTCCCA	180
CCACCAGGTT CCCTCTCCTC CACAGTCAGA AGTTCCTCCC TGCATTCAAA CACTGGGTCT	240
CGAG	244

(2) INFORMATION FOR SEQ ID NO:1359:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 391 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

GCGATTGAAT TCTANACCTG CCTCGAGGAC CCAAATATTT CTTTGAGATC TTTCTTTCAA	60
TTCTTTTGGA CATATACTCA GAAGAGAGAT CATTGGATTA TTTTGTGTTT TTTCAGAAAC	120
TGCTACCGT ATTCCAAAGC AGCTGCACCA TTTCACATTC CCACCAACAT TGCATCAGGG	180
TTCCAATTTT CCCACATCCT TGTCAACATT TGTTATGTTG TTTTGTGTTT TTTGTTTTTT	240
TTTGTTCGCG TTTGTTTTGT TTTGTTTTGT TTTGTGCACA CAGTCTCGCT CTGTTGCACA	300
GGCTGGAGTG CAGTGGTACA GATCTCAGCT CACTGCAGCC TCTACCTCTC CAGTTCAAGC	360
AATTCTCCTA CCTCAGCCTC CCCGGCTCGA G	391

(2) INFORMATION FOR SEQ ID NO:1360:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 262 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(i) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

```
GAATTCGGCC TTCATGGCCT ACATTTTTTT CCTAGTATGG ATATGCTTAT TAATGCACTT      60
GTTTCAAAT CCCAAATTGC ACAAATGTGT TAATATTTTA AGAAACAAAA TGAATCCTAC      120
AAGGAGAAATG ATTTTtagcc ACACATAGGG TTGGATCTTG AGAGTGACCT ACAGAATAAA      180
AGTACTTTTA AAATAAGTA GTCAGAGGCT ATTCAAAGGG TAAAATAATC ATAGTACCAC      240
ATTGGTCCAC TTGACACTCG AG                                         262
```

(2) INFORMATION FOR SEQ ID NO:1361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

```
GAATTCGGCC TTCATGGCCT AGACAACCTG AAAGTGGATG ACATGCTGAG TGAAGTCTGAG      60
GACAAATGGG ATACCATATG TGGAAATCT GTGGAAAGGT AAAATGTTCT TTAAGACAGT      120
TTGGTTACTC TGTAGACCTC TTTCAAATAC ACAGTAATGG TGCTTGCGG GGACATTTTCG      180
GGAACCTTAA ATATTTTCCTT TGCCTGAGGA ACTTCTGCTT GTCCTAAGTA TCCACACAC      240
ATAGCACTCG AG                                         252
```

(2) INFORMATION FOR SEQ ID NO:1362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

```
GAATTCGGCC TTCATGGCCT ACATAGCAGT ACACAGAAAC TCATCTTTGG TCTTAAACT      60
GCATAGGTAC TTTAGTCCTC TGTTGACAAA TGTTGGGTTG TTTCAGTCTT CTGCTATCAC      120
AAATAATGCT GCAAAGAATA CATTGTGTTCA TATGTCATTT CATCCTTGGC AATTTTGCCT      180
CTGGAAAGTT CCTAGAAGTC AGATTCCCAG GTCAAAGGTT AAATGCGCAT GTAATTTTGC      240
TGGATATTGT TAAATCCCCC TACAGAGCAT GCACCACTCA GCATTCCCCT CAGCTCGAG      299
```

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

```

GAATTCGGCC TATGGCCT AGCGAGATCT GCGTAAAAA TACAGCATT TTGGCAATAA      60
CTCTTATCAC TCCTCAAGAC CCTCATCTGG ATCCAGTGTG CCCACCACCC CCACATCATC      120
CGTCTCACCC CCACAGGAGG CCAGGTTGGA AAGGTCATCA CCGAGTGGTC TTCTCACATC      180
ATCCTTCAGG CAGCACCAAG AGTCACTGGC AGCAGAGAGA GAGAGGCGGC GGCAGGAGAG      240
AGAAGAAAGG TTGCAGAGAG AGCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1364:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 273 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

```

GAATTCGGCT TCATGGCCTA CCAACCCCCC CATTTCTCCC TTCCTCCAGC CACTGGCAAC      60
CACCATTTC A TGTTCTTTT GTTGTGTTGT TTTGTTTTT GTTTTTTGT TTTGTATT      120
ATTATACTTC AAGTTTTAGG GTACATGTGC ACAACGTGCA GGTGTGTAC ATATGTATAC      180
ATGTGCCATG TTGGTGTGCT GCACCCATTA ACTGGTCATT TAGCATCAGG TATATCTCCT      240
AATGCTATCC CTCCCCACTC CCCCAGCTC GAG

```

## (2) INFORMATION FOR SEQ ID NO:1365:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

```

GAATTCGGCC TTCATGGCCT AATCGGTGTC TTTGGTAAAA ATTCTATGAG GATGACATAT      60
TCCATCATGT TATTCGTTTC ACATTTCTT TGTCTCAGTC TCCAATGCAA GCACAGCTTG      120
TGGTATAACC TATTGTTTTT CCATTCTAAT AACTTCTCAA TCGATCTTCG TGTCTTTTA      180
CTGAGGCAAA TAACTGGCCA CATACTGCAA CCTAATGTGC AGCAGCAACA AAGGCAGCCA      240
CAAAGTAGCC AACGTACATT AACAGGAAGG TTCTTCTTAA GACAACTGTT AACTCTGTNG      300
ATGCTGGCTT TAAATTCTTC AGGAGCTACT TTTTCAGTTA ATGAAGAAGG GAATTCAGAT      360
TCAAAT

```

## (2) INFORMATION FOR SEQ ID NO:1366:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 245 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

```

GTTGTTAGGC TGGTGTGTT ATGTTGCTGT TGTTATGCTG GTCGTGCTGC TCCATGTTCT      60
CCAGGTGTTT TCCCTTTTA TCGTCACAGT TACCCCGTAC ACCTGACAAC TGGACATCTG      120
CGCCTGGGGT CTTCAGCCTA AACACACCTA AACCTCCAC CAAACCCCTC TGCTCCGCC      180

```

TCCCCGTG TGTGAGCGCC TCCACTGCCC ATCCCTCTGC TCCCCCA TTTCCAGGGC 240  
TCGAG 245

## (2) INFORMATION FOR SEQ ID NO:1367:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

GTATTTTGT GACTGAAGTC ACCTTCTAAA TAATTTCTAG AATAAAATTT TTATATTGAA 60  
GAAGTTGGTC TTAACCATTT TTTTTCAGG AGCATGCATT TTGAAATCAT TCTGTGGGAA 120  
GATGAAAACA AATTTAGTTC TATGTCTCCC CTTTITAGAG ATGTTGACAC TTTCCTTAAA 180  
TGACCATGC ATGATTGTC TACCACCCAG ACTCGAG 217

## (2) INFORMATION FOR SEQ ID NO:1368:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

GGCTAGAAGC AAGATGGCTG AACTCAATAC TCATGTGAAT GTCAAGGAAA AGATCTATGC 60  
AGTTAGATCA GTTGTCCCA ACAAAAGCAA TAATGAAATA GTCCTGGTGC TCCAACAGTT 120  
TGATTTTAAT GTGGATAAAG CCGTGCAAGC CTTGTGGAT GGCAGTGCAA TTCAAGTTCT 180  
AAAAGAATGG AATATGACAG GAAAAAGAA GAACAATAAA AGAAAAAGAA GCAAGTCCAA 240  
GCAGCATCAA GGCAACAAAG ATGCTAAAGA CAAGGTAGGG AGTCTCGAG 289

## (2) INFORMATION FOR SEQ ID NO:1369:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

GCGATTGAAT TCTAGACCTG CCTCGAGTGT TTTTAAAA CTCTCTCTCT TCACTGACAC 60  
CAGGTGTTGC TATTAATGTG CTCAAATCTC TCACTTATAA AAAAGAATAA AACCTCTCTC 120  
TTTTCTAGTT ACTGGTCTGT TTATTCTTTT GTAGAATGAT CTTTGGGAAG AGTGTTTTCA 180  
TTTATCCAG TCTCTTCATC TTTTATTCCT TAGTGCACTG TCATCTCGAG 230

## (2) INFORMATION FOR SEQ ID NO:1370:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs

TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

GAATTCGGCC	TTCATGGCCT	AAACAAACAA	AAAGAAGAAA	ACACTCAACA	AAACCAATCT	60
ACATGTTTTG	GACTAAAAAA	AAAAATAGAG	GTTGTATTCT	CAGTGTCCGA	CTCGGAATTA	120
TGTTGCTGCC	TCTCTGTGCT	TTGGCCTCT	GTGTGGCCGT	GTTTTGCCAG	CATGAGATAC	180
TGTCCCTCT	GGAGGATTTT	AGGGGAGGAA	GAGCCACGTC	CCCAGGGATT	GGAGGAGGCT	240
CCGGCACCT	CGAG					254

(2) INFORMATION FOR SEQ ID NO:1371:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 276 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCAGCT	ACACTTGAGT	ATTAGGAAGC	CATATAGAAT	TCGCAGGGTC	CAACTTCATA	60
GACTCTATTC	ACATTATTAG	AGTAGTAGTG	GGGACCGTTA	CTTTTGGGAA	AGGATCAGTG	120
AGACAGTATA	AACTTTGGAA	ATAATACATT	TTGTATTCC	AGAATTATTA	GATAATACTA	180
AAGCAAACCT	TTTAAATGGA	ACATTTTGAA	GTCCTGTGTA	TTTATTTTAA	TTTTTTTATT	240
TTGTTGAGA	CAGAGTTGCA	CTCACGCACG	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:1372:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 249 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

GAATTCGGCC	TTCATGGCCT	ACTCGAATCA	TAGTGATTAA	AATAGTTGGG	GTAAAGTTGT	60
AGCTTATATG	CAATACTACT	TGGAGGAATT	CTTCTACTAA	TTGTATTATA	ATGTGGAAAT	120
TGTATAGTTT	CATTGATTAA	ATCATAAATA	ATGGAAATGG	TCTCCAAGAA	GTTTTATTTT	180
TCATTTTTTT	GCTTATACAC	TCTGATTCTT	ATAATACAGT	GCTATAAGCT	ATGCACAGAA	240
AATCTCGAG						249

(2) INFORMATION FOR SEQ ID NO:1373:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 218 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

CCCGTTGTCA ATCTTTGGGT TTTATTCCTT TTTAAGAAAG AAAGAAGTTC TGCTGAATT	60
GGAAATAAAT TCTTTATTTA AACTTTCCTT CCCAGTTTTA TAGTTTCTGG TTCTGAGGAC	120
TGATGAAAAT CATCTTCAT CAGCAGATTT TCTTGCACTG TTTGCTGTGC CCCTCAAATA	180
TAATGTCTTG GGTTTTAAGA TCGAGCAGAG AGCTCGAG	218

## (2) INFORMATION FOR SEQ ID NO:1374:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 139 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

GAATTCGGCC TTCATGGCTT GGGTCTCTCT TTCCATTTC TGCTTCTTGT TCTCCAGAT	60
CTTCCCCAAA ATAAGCTCAG TGCCAGAAC TTGTGTGGCT TTGGGATATT CCACTGCCCG	120
GGCAACAGGC AATCTCGAG	139

## (2) INFORMATION FOR SEQ ID NO:1375:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

GAATTCGGCC TTCATGGCCT AGCAAGACGC AGCAAAAGTG GAACTTCCA GATACTAATC	60
TGAGAAGTTT TCAACAAGAA ACAGGTTTAG AATTAAAAAT CAAAACCTCT TTTAATTGTA	120
TTAAGAGTAA ATCATATTTT AAGACAACTT TCTTTTAAAA CAAGGGACCA AAATTTAGAA	180
AGACTTTTAT AAATAATTTT AATTATAGCC AACTTAATCC CACACAAAAT GCTTTTCATA	240
AGTATTCTCT CACAAACACT CGAG	264

## (2) INFORMATION FOR SEQ ID NO:1376:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

CTTAAACCCA GGAGTTAGAG ACCAGACTGG ACAATATAGC GAGACCTCAT TTCTAACCCC	60
CAAAAAAATA TACACACGCA CACACACACA CACAAACACA CACACACACA CACGCATGCA	120
AACTATATTA AAAAAACGGT CATGCTGCAT GGTTTTATTT TTTGTTTATT TTTATTGTTG	180
TAATGTTACT TTATTTTCTA ATATTTTCTG TTGCGGTTG GTTGAATCCT CAGCTGTGGA	240
ACAGCTCGAG	250

## (2) INFORMATION FOR SEQ ID NO:1377:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

```
GAATTCGGCC TTCATGGCCT AATTCCCCT TCTCTTTT TTTGGTTTT GGTTAATTG      60
TAATTTTGGT TTCGTCCTGA TGTATATGGA CTGCCAGAAT AGGGGGGGTG GTGGTTTGT      120
CGTGCTGTCT GGGGGAGGAA GGAATCCTTA CCCTGGCTTC CTTAATCGGG GAAGGCTTCC      180
TGAAGGAGGT GGGCTCAGAG GTGAGTTGTG AATGAAGCGG GTAGGGAGTG GGCTGGGTGG      240
ATGTTTGGG GATGTTTGGG GGAGGTGAGT AAAGGGTAAC TCGAG                      285
```

## (2) INFORMATION FOR SEQ ID NO:1378:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 384 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

```
GAATTCGGCC TTCATGGCCT AGAAAGAGCA AATATAATGA AGACTTTGAA AGAGCTTGGA      60
GAGAAGATCT CACAATTAAA AGATGAATTA AAAACATCTT CTGCAGTCTC CACACCATCT      120
AAAGTGAAGA CAAAAACGGA GGCCCAAGAG GAGTTATTAG ATACTGAACT GGACCTCCAC      180
AAGAGGCTGT CCTCAGGAGA AGACACCACA GAATTACGGA AAAAACTCAG TCAGTTACAG      240
GTTGAGGCTG CACGTTAGG TATTTACCT GTGGGTCGAG GAAAGACCAT GTCCTCTCAA      300
GGTCGAGGAA GAGGCCGAGG GCGTGGAGGA AGAGGAAGGG GCTCACTAAA TCACATGGTG      360
GTGGACCATC GTCCAAACT CGAG                      384
```

## (2) INFORMATION FOR SEQ ID NO:1379:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

```
GAATTCGGCC TTCATGGCCT AGTCAGGAAC TCCAGTTTGC TTTCTGTTT TGTGTCCTGG      60
TAGCAGCTGT TGAGTAACTT TCATTGGAGG TTGGGAAGGA AGTGAGGAGA AAGTGTTCCT      120
GTTTAGTGTT TTATTCCTA TAATAGGATG CTGCCTAACC CAGTTCATCT CTATGTCCTG      180
TTCCTGAAT ATTCCGGGTA ATTGAAAGAA AATATAATGG ATGGGCTCCA TTAAAACAG      240
CTCAAAAATA AATTCTTGTC AGTAAAGATT TCTTGTCAG ATGTCTTGGA TTGCACTTTT      300
GTTGAGGAAA GACAGTGTA ATAGTTAAAG AATGTTGATA AAATTGAAAC ATTTGGGCCT      360
TCATGGCCTA                                     370
```

## (2) INFORMATION FOR SEQ ID NO:1380:

( QUENCE CHARACTERISTICS:  
 (A) LENGTH: 366 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTCTAGA	CCTGCCTCGA	GTTGCTGAAC	GGTTTAGATC	CTCAAAAAAT	AAAGCAATTG	60
AACCTGGCCA	TGATTAACCTA	TGTNTTGGTC	GTCTATGGAC	TTGCCATTTC	TCTCCTTGGA	120
ATAGGACAGC	CTGAGGAATT	ATCTGAAGCC	GAAAACCACT	TTAAGAGGAT	TATTGAACAC	180
TACCCCACTG	AGGGCCTTGA	TTGCTTGGCC	TACTGTGGAA	TTGGAAAAGT	ATATTGAAA	240
AAAAACAGAT	TTCTAGAAGC	TCTCAATCAC	TTNGAGAAAG	CAAGAACCCT	GATTATCGT	300
CTTCCTGGAG	TGTTAACTTG	GCCCACGAGT	AATGTGATTA	TTGAAGAGTC	TCAGCCACCC	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 472 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTCGGCC	TTCATGGCCT	ACTTTAATGA	GATAGGAACT	AGTATATTCA	CCGTCTATGA	60
GGCCGCCTCA	CAGGAAGGCT	GGGTGTTCTT	CATGTACAGA	GCAATTGACA	GCTTTCCCCG	120
TTGGCGTTCC	TACTTCTATT	TCATCACTCT	CATTTTCTTC	CTCGCCTGGC	TTGTGAAGAA	180
CGTGTTTATT	GCTGTTATCA	TTGAAACATT	TGCAGAAATC	AGAGTACAGT	TTCAACAAAT	240
GTGGGGATCG	AGAAGCAGCA	CTACCTCAAC	AGCCACCACC	CAGATGTTTC	ATGAAGATGC	300
TGCTGGAGGT	TGGCAGCTGG	TAGCTGTGGA	TGTCAACAAG	CCCCAGGGAC	GCGCCCCAGC	360
CTGCCTCCAG	AAAATGATGC	GGTCATCCGT	TTTCCACATG	TTCATCCTGA	GCATGGTGAC	420
CGTGACGTG	ATCGTGGCGG	CTAGCAACTA	CTACAAAGAA	GAAAACCTCG	AG	472

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 424 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAATTCGGCC	TTCATGGCCT	AGAGTTTAAC	CCAGAACTGG	TGCTGGTCTC	AGCTGGCTTT	60
GATGCTGCAC	GGGGGGATCC	GCTGGGGGGC	TGCCAGGTGT	CACCTGAGGG	TTATGCCAC	120
CTCACCACCC	TGCTGATGGG	CCTTGCCAGT	GGCCGCATTA	TCCTTATCCT	AGAGGGTGGC	180
TATAACCTGA	CATCCATCTC	AGAGTCCATG	GCTGCCTGCA	CTCGCTCCCT	CCTTGAGAGC	240
CCACCACCCC	TGCTGACCCT	GCCACGGCCC	CCACTATCAG	GGGCCCTGGC	CTCAATCACT	300
GAGACCATCC	AAGTCCATCG	CAGATACTGG	CGCAGCTTAC	GGGTCATGAA	GGTAGAAGAC	360
AGAGAAGGAC	CCTCCAGTTC	TAAGTTGGTC	ACCAAGAAGG	CACCCCAACC	ACCCAAACCT	420
CGAG						424



## (2) INFORMATION FOR SEQ ID NO:1383:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

```

GAATTCGGCC TTCATGGCCT AGGCAGCGGC CTCTGTCCCA GGCCCCGGGG TGCCAGCGTC      60
CTGCGAGCAC CCAGCTGACC AAAGATGTTT CCCTCTGTAG AAGACTCTGC TAGACTGGGT      120
CTGAAGCTTG AGTTTCTAA CAGGTGCTGC TGCACAGGTG GAAAGGAGCC GTGGGAATGT      180
GTGTGTGGCA CGGCCAGAC AAGGGCAGGG CTGAGGGCCT CCGACTCAGC TGGGGGTAGA      240
CGGGCTCGAA TGTGGCCTGG GAGAGCCTAG GGGGCCCCAG GGGTCTGCTT TTCTATGTGA      300
GCCTTTAAAC TTCAGACAGG CCACCACCCT GCACCTGCAG GGGCTTTGGC ACAGGAGTGC      360
TGGCTTTGGA GGGACTGTGG CCTTCATCGT GGTCTCTGC CCACACTCC ACGCACACAG      420
ACAGTGCCCT AGGAGGGAAA CAGAACTAAT TACGAGGGGG AGGCAAGAGG ACGCCAAGCA      480
AGGAGTGACT CGAG                                         494

```

## (2) INFORMATION FOR SEQ ID NO:1384:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 460 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

```

GCTCGAGAGT GGGGCGTGGC AGTGTGTGCC TGTAGTCCCA GCCACCTGGG AGGCTGAGGC      60
AGAAAAATTG CCTGAACCCG GGGGTCGCAG GTTACAGAGA GAGACTCTGT CTCCCCAAAA      120
AAAAAAAAAA AAAAAAAAAA NNGTCTAAGG GTTANACAAT TCTGTATATA ATCTCTCCAC      180
AATACATTCA GAAATCTACT TTTGCTGTTG GAGTTGTATC TGAGAGCTGG GGAATTTAAA      240
ATTGCTGAAA ACAGATATAA GGGGAAAGTG AGATAAAAGC AGAAGCTGCC AAAAGGAGGT      300
ATTAGCATCA TCCTCAATTT ACACAGAATC ACATGCTAAG AGAGGCTAAG TATCTTTCCC      360
AAGATTACTC AGCCAAGTTG TGAAGCCAAG ATTTAACTGT ATCTATTCAA CTCTTATCTA      420
ATTATAAAAG CCTATGTTAT TTCCCACTGT GCTACTCGAG                                         460

```

## (2) INFORMATION FOR SEQ ID NO:1385:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

```

GCAGGAGTAT CTGAGGATGG AGAACTCAGC ATAGAAAACC CCTTTGGTGA AACATTGGGA      60
AAAATACAAG AAAGTGAAAA AACTCTTATG ATGAACACAT TATATAAGCT TCATGATCGA      120
TTGGCACAGC TTGCAGGAGA TCATGAATGT GGCAGTTCTA GTCAAAGAAC GCTTTTCTGT      180
CAAGAGGCAG CTGCGTATTT AAAAGATTTA GGTCCTGAAT ATGAAGGTAT ATTTAACTAT      240

```

```

TCATTGCA  GGATCTTAGA AAATGGAAAA GATGTTGGAA TA  TGTGT TGTTTTGGC   300
CCTGAGGAAG AATTGACAAA TATAACTGAT GTGCAGTTTT TACAGTCCAC AAGACCACTG   360
ATGTCTTTTT GGTGTCGTTT TCGACGTGCT TTTGTTACTG TAACTCACAG ATTATTGTTG   420
TTATGCTTAG GTGTAGTGAT GGTTTGTGTC GTTCTGCGTT ACATGAAATA TCGATGGACA   480
AAAGAAGGGG AGGATCTCGA G                                     501

```

## (2) INFORMATION FOR SEQ ID NO:1386:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

```

GAATTCGGCC TTCATGGCCT ACTCCAAGAG GCAGTTCTAC ATCAAGATCT CAGACGTGCA   60
GGTGTTTGGG TATAGCCTGA GGTTCACGC CGACCTCCTG CGCAGTGCAG TGCAGCAGGT   120
CAACCAGTCC TACACACAGG GCGGCCAGTT CTATTCCTCT TCGTCAGTGA TGCTCCTCTT   180
GTTGGATATT CGGGACCGAA TTAATCGCCT GGCCCTCCT GTGGCCCCGG GGAAACCCCA   240
GCTGGACTTG TTCTCCTGTA TGCTGAAACA CCGCCTGAAA CTGACCAACA GCGAGATCAT   300
CAGGGTGAAC CACGCCTTGG ACCTGTACAA CACGGAGATC CTCAAACAGT CGGACCAGAT   360
GACAGCCAAC ACTCGAG                                     377

```

## (2) INFORMATION FOR SEQ ID NO:1387:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 538 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

```

GAATTCGGCC TTCATGGCCT AGACGACGCC TATGAAGCCC TTAGTCCTTC TAGTTGCGCT   60
TTTGCTATGG CCTTCGTCCTG TGCCGGCTTA TCCGACATCA AAGGGATCAA AATTTAAGGA   120
GCTAGTTACA CATGGAGACG CTTCAACTGA GAATGATGTT TTAACCAATC CTATCAGTGA   180
AGAAACTACA ACTTCCCTA CAGGAGGCTT CACACCGGAA ATAGGAAAGA AAAAACACAC   240
GGAAAGTACC CCATTCTGGT CGATCAAACC AAACAATGTT TCCATTGTTT TGCATGCAGA   300
GGAACCTTAT ATTGAAAATG AAGAGCCAGA GCCAGAGCCG GAGCCAGCTG CAAAACAAAC   360
TGAGGCACCA AGAATGTTGC CAGTTGTTAC TGAATCATCT ACAAGTCCAT ATGTTACCTC   420
ATACAAGTCA CCTGTCACCA CTTTAGATAA GAGCACTGGC ATTGAGATCT CTACAGAATC   480
AGAAGATGTT CTCAGCTCT CAGGTGAAAC TGCGATAGAA AAACCCGAAG CACTCGAG   538

```

## (2) INFORMATION FOR SEQ ID NO:1388:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

```

GAATTCGGCC      GGCCT ACCTATTTTC CATATTCGGT GTGACTTGA ATGTACTCCT      60
GCTGTTGCTG ACGGGCAGTG GTCGGTCAGA GCAGAAGCTC AGCTGTGATT GCTGGGGGAG      120
TTCTGAGCTC CATGAGCCAC TCTGGCCACG ACACCATCTT TACTTGAAAG AAAAACTTCC      180
CTTTGATGCT GAGGCCTCCA GTGTCATAGA CGATGCCTTT GCCCACCAG GCGATGGTCT      240
GCGTGGCTCC ATCTGGGGTG TGGCTGAGGA CGGCCAGGGC TGGGGGATGC AGGGCGGCTT      300
TGCCCAACCCC ATAGATTCCT CCAAATCCTC TCGTCTTCAG TTCCTCATCC CGGATGATGG      360
TTGGGATGAT CCCAGCTCC TTTCCAATT TGTTAATCTC CTCGAG      406

```

## (2) INFORMATION FOR SEQ ID NO:1389:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

```

GAATTCGGCC TTCATGGCCT AAATTAATC TAATGGGCAA TCATAAGAAT AATTGAAAAT      60
AAGGAATTCA GGGGAGCTTA ATTCAATTTGT AGGTTTTAGG TGATACCATT GCTATTCAGA      120
TTGCTTTGGG CAATTATGT AATTTTTTCC AATGACATCC AATTTTCATAT CACTGTAAT      180
GAAGAAACAG AAAATTTAGT TCAGATTTTA AATCATCATT CCCTGATGCC ACCTCATCCA      240
ATGATGTTTC ATAAACGATG AAATCACGTA AGAACCACCT AAACCAGGAC TGATAGTCTA      300
TTGCTAGAAA CTTGGAATAA TTTCCACTGA TTTCTGTTTT CACTGGAAAC AGAACAGAGA      360
CTCCTCGAG      369

```

## (2) INFORMATION FOR SEQ ID NO:1390:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

```

GAATTCGGCC TTCATGGCCT AAGACCAAAA CTAACTGAA ATTTAAAATG TTCTTCGGGG      60
GAGAAGGGAG CTTGACTTAC ACTTTGGTAA TAATTTGCTT CCTGACACTA AGGCTGTCTG      120
CTAGTCAGAA TTGCCTCAAA AAGAGTCTAG AAGATGTTGT CATTGACATC CAGTCATCTC      180
TTTCTAAGGG AATCAGAGGC AATGAGCCCG TATATACTTC AACTCAAGAA GACTGCATTA      240
ATTCTTGCTG TTCAACAAAA AACATATCAG GGACAAAGCA TGTAAGTTGA TGATCTTCGA      300
CACTCGAAAA ACAGCTAGAC AACCCAACTG CTACCTATTT TTCTGTCCCC AACGAGGAAG      360
CCTGTCCATT GAAACCAGCA AAAGGACTTA TGAGTTACAG GATAATTACA GATTTTCCAT      420
CTTTGACCAG AAATTTGCCA AGCCAAGAGT TACCCCAGGA AGATTCTCTC TTACATGGCC      480
AATTTTCACA AGCAGTCACT CCCCTAGCCC ATCATCACAC AGATTATTCA AAGCCCACCG      540
AGCTCGAG      548

```

## (2) INFORMATION FOR SEQ ID NO:1391:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

(x) QUENCE DESCRIPTION: SEQ ID NO:1392

GTTTATTTTC ATCATCTACA GAACCAAACT CCCTTTCATG TGCACGAGTG AGAATCTCTT	60
TGTACAGTGT TTCTGCTTGC TTGAACCTTC CTGTTTCAA ATAGCAGGAT GCCAGGTTAT	120
TTTTCGTCTT AGCCACGTTG GGGTCATCAG GTCCCACTTT TGTCTGGTAG ATCTCGAG	178

(2) INFORMATION FOR SEQ ID NO:1392:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

GAATTCGGCC AAAGAGGCCT AGGGCCCTAT ACCTCCAGCC GTGAATGCCA GACTTTAAGA	60
TTGCCCCGAG GAAGCAAACCT CTTCTGTATAA AAAAAGCAGG CCATCTGCTT AACCTTGCC	120
TCCACCATAA GGCACCTGGA CTCGATTTC TCTATCTGAT AGAGGTATTT TCTGTGGCCC	180
TGGGAGCTGT CTGTCTTTCC CCTACCCCA AGGATGCCAG GAAGACGTCC ACCATTAGCC	240
ATGTGGCAAC CTTTACTTCT ATGCCTCACA AGTGCCCTTC AGAGAGCCCC AATTCTGCTT	300
TCCCACAAAA TAAACCAAT GCACTCGAG	329

(2) INFORMATION FOR SEQ ID NO:1393:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

GAATTCGGCC AAAGAGGCCT ATTCCTTTCC TTTCCCTTT GAGATTTTTT TGTGTGTGTT	60
TCCTTTTTGT ATTTTACTGA TATCACCAGG ATAGTTTACT CTCCTTCTAG CTTTCTGCTT	120
ACCGCACACT GGATAACACA CACATACACA CCCACAAAAA TGCTCATGAA CCCAATCCGG	180
AGAAGGTTCC AGCAGGTCCC CCACCCTCCC CTCCTCCTCC TACTTCTCCT CTTGACAGCG	240
AGGACAGGAG GGGGACAAGG GGACACCTGG GCAGACCCGC CGGNTCTCCC CCCACCCAC	300
CCCGCCCCCTC GCATCATACT CGAG	324

(2) INFORMATION FOR SEQ ID NO:1394:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 462 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

GAATTCGGCC AAAGAGGCCT AACTGCAACG GAGAGACTCA AGATGATTCT CTTTTTACCC	60
ATGTTTTCTC TACTATGCT GCTTATTGTT AACCTATATA ACGCCAACAA TCATTATGAC	120

AAGATCTTGG	TAGTCG	TATCAGGGGT	CGGGACCAAG	GCCC	GT	CTGTGCCCTT	180
CAACAGATT	TGGGCACCAA	AAAGAAATAC	TTCAGCACTT	GTAAGAACTG	GTATAAAAAG		240
TCCATCTGTG	GACAGAAAAC	GACTGTGTTA	TATGAATGTT	GCCCTGGTTA	TATGAGAATG		300
GAAGGAATGA	AAGGCTGCCC	AGCAGTTTG	CCCATTGACC	ATGTTTATGG	CACTCTGGGC		360
ATCGTGGGAG	CCACCACAAC	GCAGCGCTAT	TCTGACGCCT	CAAAACTGAG	GGAGGAGATC		420
GAGGGAAGG	GATCCTTCAC	TTACTTTGCA	CCGAGGCTCG	AG			462

## (2) INFORMATION FOR SEQ ID NO:1395:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

GAATTCGGCC	AAAGAGGCCT	AGAACTGCCA	TCATGAGGTC	TGACAAGTCA	GCTTTGGTAT	60
TTCTGCTCCT	GCAGCTCTTC	TGTGTTGGCT	GTGGATTCTG	TGGGAAAGTC	CTGGTGTGGC	120
CCTGTGACAT	GAGCCATTGG	CTTAATGTCA	AGGTCATTCT	AGAAGAGCTC	ATAGTGAGAG	180
GCCATGAGGT	AACAGTATTG	ACTCACTCAA	AGCCTTCGTT	AATTGACTAC	AGGAAGCCTT	240
CTGCATTGAA	ATTGAGGTG	GTCCATATGC	CACAGGACAG	AACAGAAGAA	AATGAAATAT	300
TTGTTGACCT	AGCTCTGAAT	GTCTTGCCAG	GCTTATCAAC	CTGGCAATCA	GTTATAAAAT	360
TAAATGATT	TTTGTGTA	ATAAGAGGAA	CTTTAAAAAT	GATGTGTGAG	AGCTTTATCT	420
ACAATCAGAC	GCTTATGAAG	AAGCTACAGG	AAACCAACTA	CGATGTAATG	CTTATAGACC	480
CTGTGATTCC	CTGTGGAGAC	CTGATAGCTC	TCGAG			515

## (2) INFORMATION FOR SEQ ID NO:1396:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

GAATTCGGCC	AAAGAGGCCT	AGTCCTTCAC	TAGACTATAT	GCATTTTATC	TTACCTTATT	60
CCTCATTTTA	GTGTCCAGTG	GCTGGCGTGT	ATAAACCCCTG	AATGTTTTTA	AAGATAATAT	120
TTTAAAAGAT	CACTTTAGTT	ATAATACGGC	TTCAGTTGGT	GGAATAAAGA	AATTTTTC	180
TTTTTTTTTA	TTTGTAGTAA	AAATGATAAC	TTCTCTCCAC	CCTCTCTATA	GTTAAAGCCT	240
TCCATCTGAA	GTATGATGAA	GTTCGTCTGG	ATCCAAATGT	TCAGAAATGG	GATGTNACAG	300
TATTAGAACT	CAGCTATCAC	AAACGTCATT	TGATAGACC	AGTGTTCTTA	CGGTTTGGG	360
AAACATTGGA	CAGGTACATG	GTAAAGCATA	AATCGCACAT	CTCGAG		406

## (2) INFORMATION FOR SEQ ID NO:1397:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

```

GAATTCGGCC AAAGGGGCCT AAGAATAGCA AATATCTTGT GCTTAGCAAA AAATAATCTT      60
GAAAAATTTT TCTGAAATAA ATGTTATTGA AAAATGCAAA TAATTAGAAT TAAATACCAG      120
CTGCAGTTCT ACATCCTCTT ATTGGCCAAT GTAAAGAGAA ATCAGGCATG TTAACTCCAA      180
AAAAGGACAA TTCAACAACA TGGAAACCAT GACTAATATA TGGAGAATAC AAAGAAAGAC      240
TAAAGATTTA GATCAGGCTA ATTTCTTTT ATTCCCATCA AATCCAAGTA CCACTCGAG      299

```

## (2) INFORMATION FOR SEQ ID NO:1398:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

```

GAATTCGGAC AAAGAGGCCT AGGAGAGGCG GGAGCCTGGG AGAGCCTCTG CTAGACCTTT      60
CCTGGCACTT CCCCAGGAAA GGCAAGGCAG GGCAGATGTG CGGCTGGCCA GCTGGAGTGA      120
TTTCCATGGG CTCCAAGCTG TAGGAGTGGT CCCTGGCTGC CAGAGTGCTC TGGCCAGATA      180
CAGGTGGGCT CTGGACTGGT GAGGCTGCAT TGCAGAGGCG CGCACACCCA GCTGGGCGCT      240
TATCTGTAAG GACTGGCTGG CCTGGGAGGG GCAGTCTCCC ANCCAGAANG TGAATTTTTT      300
TTTTTTTTTT TGAGATATCA AAACATCCTA AGGTACAGGA AAGAAATTGT CNACACACAC      360
GGCTCGAG                                     368

```

## (2) INFORMATION FOR SEQ ID NO:1399:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 149 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

```

GAATTCGGCC AAAGAGGCCT ATTTTGTGG AGATGTTGAT CAGATGTTCA CTGATAAACT      60
TGAGCCCCCT TTTCTTCCTC TGGTCTACCC ATCTAGAATG CTATGACCCA TCTCAGACAC      120
ACCCCTCTGG GAAGCTGCCT GAGCTCGAG                                     149

```

## (2) INFORMATION FOR SEQ ID NO:1400:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 599 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

```

GAATTCGGCC AAAGAGGCCT AGTCGATGGA GATAAGTGTT TTAATTACTT TTTAATGTC      60
TGTGCTTTTG TATTTTCTC CTCTCTTCC TTTTATTCC TGCTGTNGAG ATTACTGCCT      120
CATCTCCACA GCAGGTGGCT GTTGCAAATT TGTTTCTTT GTAAGCCTGG AAGATTATT      180
TTGTAATATA ACTGTTTCCT TTAGTATTT TATTATTAAT GATTCTTTA CTTGGGATA      240

```

```

TAGTGTACTT  ACAGTCCT AACAGTAAT TTCCTAACAC TATCTGAA CTCGAATCAT      300
TAAGAAAAAA AATCTTTGCC TGAGGCGTAT TGTTTGAGAT TTTTGCTTAC CCTTACTTCA      360
CAATGCGGGG ATTAAAATTT AAGGAAATTG TTTTATAGCA AAAGCCAAAT GAGAAAAAGA      420
AACAGAGAAA ATAGAAGGGA GGGAAATAAA GAAAAGGAGA AGAGAAAAGG CTCAAGAGAC      480
AAAGTATACT TTAATAAATA ATACCATAAA GCAGAGTAAT GAGGATAAAT TTATGGCTGA      540
AATATGAAAT TACATTAACA TCTTTCTAG AAATGTTTCA ACTAAACCAA ATGCTCGAG      599

```

## (2) INFORMATION FOR SEQ ID NO:1401:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

```

GAATTCGGCC AAAGAGGCCT ACAGTCACCC TATAAATAG ATTAAGTGTT CCGAGTTCGG      60
TTGGGTTTTT CGCAATTAAA AATTGTGTTA ACAGTTTAGT GTTTCCTTACA GATAACACTG      120
ATAACACTTT TTTGTTTTCA TTGGGTCTTA TCATTGGTAC AGACTGATCC AAAAATCCAA      180
TTGGCTTGCT AGTAATTTTT TCCTGTGAAT TGCTAAGATT TATGGGTAAA TTAAATTTTC      240
TTTTCTTTT CTTTTTTTTT TTTTAAGCA TTTGCTCCTT AAATGCAAAT CGTACCACTA      300
AGATCCTCTC ACAACAGATT AAGGTCGAAT TTGCAGAGAC ACTCGAG      347

```

## (2) INFORMATION FOR SEQ ID NO:1402:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

```

GAATTCGGCC AAAGAGGCCT ATATAACTC AACTTTTCTT TGTCTCTCTT GCCTGTGATG      60
AGTAACAGAA ACCATCTTCC CAGAACTAT CCCCACCCAC CCCCAGCCCA GCCCGAGCAG      120
CCCAGACCCA GGAAGGAGGT CAGAGCCTGC GTGACTGTGT GGCAAGGATC CCCCTCAAAG      180
CAGGCAGTGA TCCCCCTCAA AGCAGGCAGT GATGACCAGG CTCCCCAGGG GAAGGAAAAA      240
TGGTTGATTA CCCACCTCA CTTTCTCAAG TTCCTGAAAG CCTCCCATCT TTTCAGGATG      300
TTTTCTTCT GCTTCCTTTC TGGGGTGATA TTGCAATGCA TGTGTCAGTC CCTCGAG      357

```

## (2) INFORMATION FOR SEQ ID NO:1403:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

```

GAATTCGGCC AAAGAGGCCT AAGGATTGTC ATAGCCAGGA CCACACTATT GCTTTTTTCAT      60
AACATTTTCT TTTTGTCTTCT TTCTTTTGAA TTTCTTACAG GGCTGCAAAG TATGCCAGGG      120

```

GAGTATGTA CCGGGGTGG TCCAATGGGT GTGAGTATGG GACCAAG TTATACCCAA 180  
 CCCCAGATGC CCCCCATCC TGCTCAGCTG CGTCATGGGC CCCCCATGCA TACGTACATT 240  
 CCTGGACACC CTCACCACCC AACTCTCGAG 270

## (2) INFORMATION FOR SEQ ID NO:1404:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

GAATTCGGCC AAAGAGGCCT ACAGCCTTTC TTCCCACTTT TAACTATAGA ACTTGCTTTT 60  
 AATTTCACTG ATATATGGAC ACAGTCAGAC GAGAACTCCT TCATGCTCCT ATTACCACAG 120  
 CTACTCGAG 129

## (2) INFORMATION FOR SEQ ID NO:1405:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

GAATTCGGCC AAAGAGGCCT AATTGCTTAA GCTCCTCAAG TTCTTTTAT TAAGAGTTGT 60  
 AAGTAAATTA TAATAAACAA TAACATAGTC TCTGCTATTT TGATCCTTGC TCTTTGCCAT 120  
 GCTGTTTAC TTATTCTTTA TTGCATGTTT CACATCTATC AATTTTGGGA TATGCTTCTC 180  
 ACCTTCCCTA CTAAATGTG AGTCCGTAA ACGCAACAGC TACCTCGAG 229

## (2) INFORMATION FOR SEQ ID NO:1406:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

GAATTCGGCC AAAGAGGCCT AGTGGAGGTA TTTTGAAAAT ACAATTTAAC TACAACAACA 60  
 TTTGCTTATT TTTAGAGTCT TTTATGACAT CAAGAGAAAT GATCCCAGAA AGAAAAAATC 120  
 AAGAAAAAGA ATCTGATGAT GCCTTAACTG TGAATGAAGA GACTTCTGAG GAAAAATAATC 180  
 AAATGGAGGA ATCTGATGTG TCTCAAGCTG AGAAAGATTT GCTACATTCT GAAGGTAGTG 240  
 AAAACGAAGG CCCTGTAAGT AGTAGTTCTT CTGACTGCCG TGAACAGAA GAATTAGTAG 300  
 GATCCAATTC CAGTAAAACT GGAGAGATTC TTTCAGAATC ATCCATGGAA AATGATGACG 360  
 AAGCCACAGA AGTCACCGAT GAACCAATGG AACTCGAG 398

## (2) INFORMATION FOR SEQ ID NO:1407:



- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 131 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

```
GAATTCGGCC AAAGAGGCCT AGTAAAGTG TCTGATCTGA AACATAATAC CCTCCCTTTT      60
CAATCCTGAT GTACCTTCTT CTAGTCTTGG TCTTTGGCAC CTTTTTTTCA AGAAGAAACC      120
ATACTCTCGA G                                     131
```

(2) INFORMATION FOR SEQ ID NO:1408:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 622 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

```
GAATTCGGCC AAAGAGGCCT AAGTCCAGGC TGTAGGGTCC CTGGTCACAG AGGACCCGGG      60
TCACCCGGGA CTCATCTTTC ACTTATTGTT TTTCAAGTCC AGGGCCCCAT GGATGCCACT      120
GAGATGATT CAGATGTTAC AGTCATCAAG AGGGATTGGG GCCGCATTCT GCCTCATTCC      180
TTGGCTTTTG AAATCAGAGA CGACATTTTC ACTTTAAACA AACCCAAACC ATTCCTGCTG      240
GTGGAGGATT TCTCCTGCAT CTCGGGGGTG GATTTTCACT GATTATGTC TGCAGCGTGA      300
GCAGTCTCTG GGCTTTTCTG CAGCTCCAGA TGTTAGATGT TTTATCTCTC CGTCTTTTAT      360
CNGCTTCACT CCTTGCCCCA GTCTATCCTC GCATGCTCCN TCCTNNGGGA GGGCTTCCTG      420
TCTTCACAGC CGCACCTTCC TCCCACTGCT ACCAGTGCCA TGGACCCACT GTATGTTTCC      480
TGGGGGCCAT GCAGAAGGTC CCCAGACCAG TGCTGGCCTG CGACAAATAA GTACAGAAAT      540
GGAGAATAAC CCCTTTCAAA CACATAATAG CATTGTAGAT AATCAATCAG GAGACTCAAG      600
TTTTTACTGC GTGCGTCTCG AG                                     622
```

(2) INFORMATION FOR SEQ ID NO:1409:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 328 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

```
GAATTCGGCC AAAGAGGCCT AGAACATGCA GATTTTTCCT CTAGAAAACC CCCTCCCCAC      60
ATTTCAGCTTA TTAGAAATCC TTAACAGCAG GTAACCACCA ATGCTCCTGC CTTCTAGCCA      120
CAGTCTGCTC CTGCCCCCTAC AGGCTTTGAA CATGCAGATT TTTCTCTAG AAAACCCCTT      180
CCCTGCATAT TCTCTCCTCT CCCCACTCAC ACAACACCT GGCTGCCAG GCCCCGTGGG      240
GCTGCCGGGC TTCTGTGAAC CTGCCGCTG CCTTGGAGCT TCGGCCTATG CCTCTGCCCG      300
CCTTACAGAG CCTGGATCCA AACTCGAG                                     328
```

(2) INFORMATION FOR SEQ ID NO:1410:

- (i) UENCE CHARACTERISTICS:  
 (A) LENGTH: 324 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAATTCGGCC AAAGAGGCCT NNAAAAAAAAA AAACCAAAAA AAAAGAAAAA GCTGACACAG	60
TTCTCTGAAA AAAGCCTAGA GAACACAAGG GTGACACAAA CTCCAGAGAG TATGCTGCTT	120
GCAGCTTTGA TGATTGTATC AACAGTGGTA AGTCACCCCA TGTCTGCAGG AGCAGCTGCA	180
GCTAATTATA CCTACTGGGC CTATGTGCCT TTCCACCCT TAATTTCGGGC AGTCACATGG	240
ATGGATAATC CTATTGAAGT ATATGTTAAT AATAGTGCAT GGTACCTGG CCCCATAGAG	300
GATCGTTGCC CAGCCCAACT CGAG	324

(2) INFORMATION FOR SEQ ID NO:1411:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 323 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCGGCC AAAGAGGCCT AGAAGTTGAG TGAAGGAGAA AGAGAGGGAA GTAGAAAAGA	60
GGAGAAAAAT GTTAAGCAAA AAAGGTATTT TCCCTTGGAT ATTAAGTGC ATATCTGAAG	120
AAATGGCATT CCGGACAATT TCGTGTGG TTGGAGTATT TATTTGTTCT ATCTGTGTGA	180
AAGGATCTTC CCAGCCCCAA GCAAGAGTTT ATTAAACATT TGATGAACTT CGAGAAACCA	240
AGACCTCTGA ATAATTGAGC CTTTCCACC ATCCTTTAGA CTACAGGATT TTATTAATGG	300
ATGAAGATCA GGAACAACTC GAG	323

(2) INFORMATION FOR SEQ ID NO:1412:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 149 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCGGCC AAAGAGGCCT AGTTAGTGC TCTCCTTTT TCTTTTTTTT GTCGTGCATA	60
TTTTATTCT GTAGTTTCTG GTTAGCTACC CTAAAGTGAT TTAAAAATTT AGAATGCTTT	120
GTGTTTCCTA TTTGGTAATC AACTCGAG	149

(2) INFORMATION FOR SEQ ID NO:1413:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 308 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

```
GAATTCGGCC AAAGAGGCCT AATAAGAATT ACTTGTA ACT TTAGGGGGCA TTTAGAATTA    60
TATTTGTCTT ATTTGAGATT TGGATTAAA TTTTATTTTA GAGCATTTT TAAAAAATAA    120
ATAGAAGTGA GGCTAATATT GTTAATTATT CTCTTTAAAA AATACAGTAT TTGCTTTGGG    180
TTAAAATTTT CTGCCCCAAC ATCATTATCA AGAGTCAGCA TATTACAATG ATAAATTTAG    240
CATTTACTGT GTGGCAGGCA TTGTTCTATA TACTTTATTC GTTAAATTCA CCAGCGAACA    300
CGCTCGAG                                     308
```

(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 252 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

```
GAATTCGGCC AAAGAGGCCT ACTCAGAGCT GTTACGACTA GTCAGAGAGA GCGAGGTGGC    60
TGGTTCATGT TTGCAGATAG AGACCTCACT GTGTGGTGGA CTCCCCACT TCCTGCTGCC    120
TTCATCCTGA TGGGTGGCTG CCTTCATCCT GATGGGTGGC AGCCTTGCCC TGCAGTGGGA    180
GACCCAGGTA ATGTAGTTTT TTGTTTGTA TCCCTGATCT CTTCTTGCA TTTTGGCCGG    240
GCAGGTCTCG AG                                     252
```

(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 332 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:

```
GAATTCGGCC AAAGAGGCCT AGTGATTCAG AACCATTTGA TAATAGCTTG AAAGCCTAGA    60
TNGACTCTCT GCATTGCCAC CCTCCCTAT TCTCTAAGC CCACTCCATT CACGCTGTCA    120
TCCACACCAC TCGGCCACCA ATTTCACT GCGAAATCCA GTTCCAGTT CCTCATCGTG    180
TTTATTTGCA ACATTTGAAA CAAGTGATCA ATCCCTTTTC CATGAAAAAC CTTCTTTGCA    240
CAGTTTCCAG AATTCTAAAC TTTCCTGGTT TTCCTCCTAC TTCAACTTTC CAATTACCGT    300
CCCTCATTTT TACCTCATCA GCCCAACTCG AG                                     332
```

(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 346 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

GAATTCGGGC CAAAGAAGCC TACAANAAAN TATATATATN TGGATCTTCT GAAAAGTTTT	60
TTGAGGTGCA AGTTTTCTCT CTTTTTTTTT TTTTTTTTTT TTCTCATTGA TTAATGGACA	120
TGATGCTGAG ATTCAATCAC TACATGAAAC ACCTGGCTGT GAAAACAAAA CAACCCAGAG	180
GGCTGTGTTT CAAGCAGCGC TGGGGAAGCT ACCTAACAGT CGGATGCCAG TTTTGAAGA	240
TTACCATGC GTTCTGACCC TCTGTTCTGTC TCTTCTCTCT CCTCTTTCTT CAAGAAGGAA	300
ATTGATCCTA GTGATTTCAG CCCATGCATT AAACAGGAAA CTCGAG	346

## (2) INFORMATION FOR SEQ ID NO:1417:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

GAATTCGCCA AAGAGCCTAA GGGCAAGCAG CATTCAATATA TCATATGACT TCTACAACTA	60
AAATGAAGCT ATTAGCACTA GTATTTAGTA ATCTAGTAAC TCTCCTTCCA GCCCTCTTCA	120
CCCTCGAG	128

## (2) INFORMATION FOR SEQ ID NO:1418:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

GAATTCGGCC AAAGAGCCTA GGGGAAGCGCT CTTCAACGCCA CTGGGATCCG CATCTGCCTG	60
GGATCATCAA GCCCTAGAAG CTGGGTTTCT TTAATATTAGG GCTGCCGTTT TCTGTTTCTC	120
CCTGGGCTGC GGAAAGCCAG AAGATTTTAT CTAGCTTATA CAAGGCTGCT GGTGTTCCCT	180
CTTTTTTTCC ACGAGGGTGT TTTTGGCTGC AATTGCATGA AATCCCAATG GTGTAGACCA	240
GTGGCGATGG ATCTAGGAGT TTACCAACTG AGACATTTT CAATTTCTTT CTGTGTCATCC	300
TTGCTGGGGA CTGAAACGC TTCTGTGAGA CTTGATAATA GTCCTCTGG TGCAAGTGTG	360
GTAAGTATTG ACAACATCAC TCGAG	385

## (2) INFORMATION FOR SEQ ID NO:1419:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

GAATTCGGCC AAAGAGCCCT AGTAGGTTTA TAAACAGAAG TTTAAACTTG TAAGCTTAAG	60
CTTCCGTTTA TAAACAGAAG TTTAAATTA TAGGTCCTGT TTAACATTCA GCTCTGTTAA	120
CTCACTGATC TTTTGTGTT TTTCACTTT GTCAAGATT CTTTACATAT TCATCAATGT	180

```

CTGAAGAAGT   TATGCA GATCTTCAAT TCCAGAACTC CAGT       G GAAAAATCC      240
CAGAAATTGG   CAAATTGGG GAAAAAGCAC CTCCAGCTCC CTCTCATGTA TGGCGTCCAG    300
CAGCCTTGTT   TCTGACTCTT CTGTGCCTTC TGTGCTCAT TGGATTGGGA GTCTTGCAA    360
GCATGTTTCA   TGTAACTTTG AAGATAGAAA TGAAAAAAT GAACAACTA CAAAACATCC    420
TCGAG                                              425

```

## (2) INFORMATION FOR SEQ ID NO:1420:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

```

GAATTCGGCC AAAGAGGCCT AAGACGCATG CCTGTAATCC CAGCAACTCG GGAAGCTGAG      60
GCGGGAGAAT CGCTTGAACC CGGGAGCGGA GGTGCGGTG AGTTGAGATG GCGCCACTGC     120
ACTCCAGCCT TGGCAAAAAG AGCAAACTT CATCTCAAAA AAAAAAAG AATGTGTGGA     180
ATAATGGGGG TTTTTCCTT ACTTTGTGG CTTATTCTCA CTTACATGGG GATAGCCTTG     240
GTCTTTGACT TGGATAGCCT CGAG                                              264

```

## (2) INFORMATION FOR SEQ ID NO:1421:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

```

GAATTCGGCC AAAGAGGCCT AAGTGAATCG ATGTTCTGGC TTGGCTGTCT TTGGTGTITT      60
CATTCTTTCA TTTCTTTCTC CCTGTCCTCA TCTCTCTCTC CCCGTGCCCT GCTCCCTACA     120
CCTATCCCTC CCCCTACCTT CGAG                                              144

```

## (2) INFORMATION FOR SEQ ID NO:1422:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

```

GAATTCGGCC AAAGAGGCCT AGAGAGAATA AAATACATAT AGTTGATTAA AGGAAGGAAG      60
TTTATTACTT AGGGAAAAGG AAGGTAAAAA AAGACCCTAA GCAATAAAGG CAATTCTTTT     120
TTAAGCAGAA TACTTTCATT TTATTTCATT TTTGTTTACC AGTGTGTGTA CGAAACTGTC     180
TGCTGGGGCT ACTTCAGCTG AGATGATTG GCTCTTTTCT GTGGCTTTCT TCTGTGTTCT     240
TACATCAGCA CTGTGGTTAT TACACCAGCT ACCAAGTCAT CTCGAG                      286

```

## (2) INFORMATION FOR SEQ ID NO:1423:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 157 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

```
GCGATTGAAT TCTAGACCTG CCTCGAGACA GAGCAAGATT CCGTTCCCAA GAAAAAAAAA 60
TTGTTCAACA ATAAGGGCAA AGGGAGAGAA TCATAACATC TGATTAAACA GAAAAAGCAA 120
GATTTTAAAT ACTAACTATA TAAGGATGCA TCTCGAG 157
```

(2) INFORMATION FOR SEQ ID NO:1424:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 408 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

```
GAATTCGGCC AAAGAGGCCT ACTCAAAAGA CAAAAAAGAT ACATTAGGCA GTGTTCTGTA 60
AACATGGGAA AATTATTTTA GGTAAATGG GCTGAGAAGA AATTGCTAA ATTTTGCTTT 120
TGTTACCACG TTTCTGAAA TGATGATAAT AAATAATATT TTAAGGGT GAATAGAAGG 180
ATCTTTATTG TAGGTACTGG TGTTAAATTT TAGGTTTCTG AATAATACTG TAAAGCTACT 240
TTCTTTACAC AGATTAAACAC ATTTATCTTC TTGAATTATT TAATAATGAA TGTCAAAAAA 300
TTCGAAATCT CATATAAGAT CTCACITTTGA AACAAAGTAT ATAAACTGTT GATTGCACAA 360
TTTGGGTTTT GTGAAGCAGT CAGTTTTGAC TATAAGTGGC AGCTCGAG 408
```

(2) INFORMATION FOR SEQ ID NO:1425:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 468 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

```
GAATTCGGCC AAAGAGGCCT ATTCTTGCTC CTAAGAATA ACTGTGCTTG AAGAAGAAAA 60
TTCCCAACAT GGACAAACCA CGCAAAGAAA ATGAAGAAGA GCCGCAGAGC GCGCCAAGA 120
CCGATGAGGA GAGGCCTCCG GTGGAGCACT CTCCCGAAAA GCAGTCCCCC GAGGAGCAGT 180
CTTCGGAGGA GCAGTCCTCG GAGGGAGGAG TTCTTTCTG AGGAGCTCTT GCCTGAGCTC 240
CTGCCTGAGA TGCTCCTCTC GGAGGAGCGC CCTCCGAGG AGGGTCTTTC CAGGAAGGAC 300
CTGTTTGAGG GCGGCCCTCC CATGGAGCAG CCTCCTTG TGAGTAGGAAA ACATAAGCTT 360
GAAGAAGGAA GCTTTAAAGA AAGGTTGGCT CGTTCTCGCC CGCAATTAG AGGGGACATA 420
CATGGCAGAA ATTTAAGCAA TGAGGAGATG ATACAGGCAA CTCTCGAG 468
```

(2) INFORMATION FOR SEQ ID NO:1426:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 309 base pairs

TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

TTTGACCAGA TTATTCTTCT ATGCTTTTTT GCAATAAATC AAATCCCACA TATCTACAAG	60
TGGTATGAAG TCCTGCACCC CCCAGGAGGC CTGTCCAGGC ATGTCTTCAG AGGCAGGGTG	120
GGTTACACTC ATTTACCTCC CCTCTCCCCA CCAAATTATG ACACAAACGA GTATGTTTCC	180
TCTCTAGAAC CCTGTAATGC CTCCTCCCCC ATCCCCAGAG CTCCTTACTG TAGGTCTTAC	240
CCTGGACAAG GATTTTTTCA AGTTGGAGGC ACAGAACATG AGCAATCTGA CATTCCCACA	300
GGCCTCGAG	309

(2) INFORMATION FOR SEQ ID NO:1427:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 501 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GAATTCGGCC AAAGAGGCCT AAGTGAGGAC AGGGCAAAGA TTTTATAGTC TCCTGTAAAC	60
AGGAAGTGTC CTAGTCTGAC GTAAGTCTA CGTTGTACCT GGATGGCCTC TTTCTTGATC	120
TTCACGGGTA CGTGTCTTCC AGCCAGGGTA GGTGTCTTCC GGCCGGCTTT CTTCCTGCTT	180
CTGCTATTTT GCTGGCCAC ACTGCTGGCG CAAGGCTTGC GCCTTGGTAC TGGGCCTGAG	240
AAGGGAGGAG TTATTCATCC CCTTAAGCTT TCAGGCCCCA GGGAGAATCT TACACTACTG	300
GGCTGCATTT CCAGACAATT AGGGCATTCT AAGGCACAGG ATGAGGTAGG AGGTCCGCAC	360
AAGATACAGG TCATAAAGAC CTTGCAGATA AAACAGCTTG CAGTAAATAA GCTGGCCCAA	420
ACCCACGAAA ATCAAGATTT TGACCAGAGT GACCCTCTGG TCATCCTCAC TGCTACTACTC	480
CCACCAGCAT CAGACTCGA G	501

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 135 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAATTCGGCC AAAGAGGCCT AGACCTTGTT TAGTGTGTA AAGTTCTTCC AGTCTCGGAA	60
TGGTAAGGAA TTTATGCATG CTTACTCCAT TTTCAATAAG AAGTTTTACA AATGCAACTC	120
TATCCATTAC TCGAG	135

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 245 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

```
GAATTCGGCC AAAGAGGCCT AGGGGCAGCG AATGTTTTTA GAAGCAGAAA ACTTTCCTAA 60
TTTGGTGAAA GACATAAATT TACAGATTTC AAGAAGCTCC ACAAATTCCA AATATGATAA 120
ATATGAAGAA ACTCATAGCA AGGATGCTAT ACCACACACT TCTGAATAAT CCACAGGTCA 180
AAGAAGTCAG ACTCTCCGGT CTGACATGTA AAGGGCCTGG AAGTCGTCAC TCCCATCCTC 240
TCGAG 245
```

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

```
GAATTCGGCC ANNAGAGGCC TAAGAACTG GAAGTGCCTT TCATCTCCTC CCCCACCTAA 60
CTCCCCAGAA TTAATCACAA ATACTTTTGT GTGTATATTG TTCTGGAAAT TGTAATGTGT 120
TAAACAAATC TACTAAGGTA TACTCTTCTG AAATTTTCCT TTGAAAATTT AGTTTATAAT 180
TTGGATTTAT TTCTTGATGA GCACATGCTA AACTCATTCC ACCCTTTTTT GATGAAAATT 240
ATTACATGTT TATTAATATA TCACATTCCC TCCCTCCCTG TCCCTTTTTT CCCCATAAA 300
ACACAATACT GTCAACTCGA G 321
```

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

```
GAATTCGGCC AAAGAGGCCT AGTGTGAGAC ATTTGTCATT GCTCAGAATT TTAAAATTGC 60
ATTCCAAGCT GTTGGATTGT AGTTTAAGTG AGGCCAACT GGGCGGAGAT CAAACACACC 120
ATCAAAGAAT TACACACATA TCCTTGTTGC CACATCGCTT TTGTTGTTTG TTTCAAGGAT 180
GCTGTGTGTG TTAGTAGGGT TAAGACTCTT CTCCTTGCTG GAGGGATCTC CTCGAGAGAT 240
TTTGAAAACA GGAAACAGAT TTCTCTCTCC CTCTCTGGT AGTCTTCCTA TTCGTGTTAG 300
AAACAATCAA CTCGAG 316
```

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA



## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

GAATTCGGCC	AAAGAGGCCT	ATAAAAATGC	AAAAAATCCA	GTCTAAATAT	TGTCTATAGT	60
TTTTTAGGAT	TATAGTGTA	TCTGCTCTTT	TAACTTATGT	ATCTCTACAG	CCTGCCACCA	120
TATAAGCTTT	TAATTATAAA	ATTATGATGC	TTGACATTGG	GGAGAAAGGA	ACATAAGCAC	180
CCATAATGAG	TCATTTTTGT	TGACTGTATA	AATGAGTCAG	AGTTACATGT	AAGGATGAGA	240
ATATCCTCCT	ACAATTTTGG	TTTTTGATCT	TGATTTTTTC	CCATTGACTC	TCTTTTCTCC	300
CCGCCATTCT	CTCTCTTGCA	CGTAGCACAC	TTTTGCGCTC	TGTCTGCTAT	TACTGCTATT	360
ATAAACCTTT	TACTGGACTT	CAGTTGTAGT	GACCATTAGG	TCCTAAACAT	AGAACTAAGA	420
CGGTAAGTGG	ACTTTAATAG	AATACTTATT	AATTTTAATA	ACTAGAGTTC	ATAATTTAGA	480
ATTAATATAT	GAGAATTAC	TGTATAATCC	TCGAG			515

## (2) INFORMATION FOR SEQ ID NO:1433:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

GAATTCGGCC	TTCATGGCCT	ACTGCTTTTT	TTTCTCTTTT	TTCTTTTTCC	CTTTTGACTT	60
TTGAGGCTCC	TGTTCTTTGG	CAGCACCAGC	TCCTTCTATT	TCTGCAGCCA	AGGCATCAAG	120
ATCAATGTCA	TCCTTGGTGC	TGTCTTCGCT	CTTGTTTTTC	TGTTTCTTCC	CCATTGCTTG	180
TCAATGGCGC	TCGTGGCCCC	AGCCCTCTA	TTCGGTCTCT	CACAGACCCA	CTGTCTCCCG	240
GCTGACTTTG	GTCTCCGCTC	AGCTCTTTTC	CCCTCGTGCT	GCCGCCGCTC	GCACCCGGCT	300
CGAG						304

## (2) INFORMATION FOR SEQ ID NO:1434:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

GAATTCGGCC	AAAGAGGCCT	AGAATTATG	TAATCCCAGG	GTGGCTACCT	ATTTCAGTAG	60
TATTCCTCTC	GGCTCAGTTT	TAAATTATG	TTAGAAGCTT	GGATTTCTCC	CTAAGAGTTC	120
AAATTTTCCC	AATTATATTT	GGCTTCCAGT	TGACTTTGAT	ACTGGAATTC	TCTGCCAGGA	180
AGGAGTGAGG	CCATCATGTT	TCCACTTATG	CCATCAGTGG	CATCTCTGAT	ATTTTGCCAC	240
GTGTTGCCCC	TGTACAGCCC	TGAGGTGTTG	GGCAGAGGAG	GCCAACTCGA	G	291

## (2) INFORMATION FOR SEQ ID NO:1435:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

(x1) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

```

GAATTCGGCC AAAGAGGCCT AAGACCCCCC TCAGCCTCCC GGAGTGCTGG GATTACAGGT    60
GTGAGCCAAT GCATCCAGCT GACTTTTGA CTCTATCTTG AGGTAGCTGG GAGCCACTGA    120
CATATGTCAA GCAAGGGATT GACATGATCA GATTATTATG TAGAAAGGCC AGTCGCTCTG    180
TCTACAGTGT GGAGAGTGGA TTGGGAGGCA GAATGACCAG TCTGGAGGCT ATTATAGTAA    240
TCCAGGTTAC AGATGGGGGT AATGAGACCT AGGCAGGTAA TAGCGTGGCT AGAAGGAATG    300
GATAGATTCC AGAGACATTG GGAGGTGAAA TCAGGGGCTG GCGATTAAAC TGGGTATGAA    360
TAAAGAGGTA GAAAGAAGAT TTGAGGATGA TGCTCAGCAT TGAACAAGAG GGTAGACTCG    420
AG

```

(2) INFORMATION FOR SEQ ID NO:1436:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 142 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

```

GAATTCGGCC AAAGAGGCCT AAGCTAGTTA TATGTTATTC TGGGAAAAAA TATTATTTGT    60
AGTTATTGCT ATCATGAAAA ATAAAATTTT ATGTGTCCTA AATTAAATTA TATTTTATGA    120
AACATTAACC CTGACACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1437:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 263 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

```

GAATTCGGCC AAAGAGGCCT ACGTACATTT ACTCTTTATA CATGTTTTTT TTGTATGTCA    60
TACCTTTACA GTCATTATTC TTCTTGATGT TCATATCTCC CCATCTTTGG CCAGTTAGAG    120
CATTTCCAAG TGAGCTCCTG TGTCTTTTGA ACAAGACCCC AGTAATCGTT CTGCTTTTAG    180
ATAGAATAAG ATGTTTGAGG ATCTTTTAT ACAACTTTAC CCTAGACCTG AACTCAGACA    240
TCTCTCCAAG GAGCGAACTC GAG

```

(2) INFORMATION FOR SEQ ID NO:1438:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 467 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

```

GAATTCGGCC AAAGAGGCCT AGCAGCCTCT GCCTCCCGGG TTCAAGTGAT TCTCCTGCCG    60

```

```

CAGCCTCCTG TCTGGG ATTACAGAGG CTATTGGAA GCTCC T GTTTAGAAGA 120
CCTGGACAGC CAGAAAGTCA TTAGTCCTAT CCAAATGAA GCAATTTGTG CAGGAAAAAC 180
AGATATTTTA TGAAGAAGT GTGAGTTTCT GGTAAATCGA ATGTGCCGTC TTGAAAGCCT 240
CATGCAGTCC TTGAAGATGA ACATCTTTCG GCTGCAAACT GAAAAGGATT TGAATCCTCA 300
GAAAACAGCT TTTCTGAAAG ATCGACTGAA TGCAATACAG GAAGAGCATT CTAAGGACCT 360
GAAGCTGTTG CATCTCGAAG TTATGAATTT GCGCCAGCAA CTGAGAGCTG TAAAAGAGGA 420
AGAAGACAAG GCACAAGATG AGGTGCAAAG GTTGACTGCC CCCTCGA 467

```

## (2) INFORMATION FOR SEQ ID NO:1439:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 103 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

```

GAATTCGGCC AAAGAGGCCT AGGCAGATCT GGCAACTTTC ATATCTGATA TTATGTTACT 60
GAACTAATT TTAGGTCGCT TTGCATCTCT CTGTGCCCTC GAG 103

```

## (2) INFORMATION FOR SEQ ID NO:1440:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 465 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

```

GAATTCGGCC AAAGAGGCCT ACATNTTGA ATCTTAACT GNNTTTTCT CTTAGTATTG 60
CTAATGAGTA AAGAAAAGTC TCATAAGGTA GCCAAATGAA AAAGAATGAA AGGGAAGTG 120
AAAAATTAAG GGGACNAAAG ATGGGATGTG AAAAGAAGAA TTCTAGTTTG ATGGTGACTC 180
ATATTCACGA TAGGATACAA AGTGTGATTT GTTGGAACA TGTCCTAAAT TTCTAAAATT 240
CTGCTTCTCT GCCAAAAGCA ATGTCTTCT TGGTTGATAT TTGAGTTTAA AAAGGGTCAA 300
ATCTTTCTAA TTTTGTAT CTNNAGAGGG CAGCACTAGA AGAAATCAGC AGGTCTAATC 360
CCACCGTAA GAAACTACC ACTTCTTGAT TTTTACAGAT TTAATAAAT CTTTTCAGTG 420
ACCTTCTTT TTAATGTAAA TACAAATTA AACCTTAGGC TCGAG 465

```

## (2) INFORMATION FOR SEQ ID NO:1441:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 336 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

```

GAATTCGGCC AAGAGGCCT AGAATTATAC AGGTAGAGAT GTATGCAGAT GTGTCCATAT 60
ATGTCCATAT TTACATTTG ATAGCCATTG ATGTATGCAT CTCTTGGCTG TACTATAAGA 120
ACACATTAAT TCAATGGAAA TACACTTGC TAATATTTTA ATGGTATAGA TCTGCTAATG 180

```

```

AATTCTCTT AAAACATACT GTATTCTGTT GCTGTGTGTT TTTTAA TTAGCATT 240
AGGGAATGCA GCATTTAAAT CAGAACTCTG CCAATGCTTT TATCTAGAGG CGTGTGCGCA 300
TTTTGTCTT ATATGAAATT TCTAATCCCT CTCGAG 336

```

## (2) INFORMATION FOR SEQ ID NO:1442:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 119 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

```

GAATTCGGCC AAAGAGGCCT ATGATTTTGA GACATCCAGA AAGCAAACCT TAACTGTCTG 60
TGAGGTACAG AGACTGGATG ATGTTAAAGA AAACCATAGT TGGACACAAG ATACTCGAG 119

```

## (2) INFORMATION FOR SEQ ID NO:1443:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 214 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

```

GAATTCGGCC AAAGAGGCCT AGAGAAATTT TAAAAGCAT AGTTGAGGCA TATTTTTC 60
TAATTATATA CTTATCTGTT TATTGCCCAT GGAAATATA TGTGTAGAAG TATTTCTTCT 120
GTTATTTGTT ACTATCTTCT TAATTTGTTT CAAAGAAAAT GCTGCCATAC TGCATTCCCT 180
CTGGAAGGAA ACAAACAAA ACAAACCTCT CGAG 214

```

## (2) INFORMATION FOR SEQ ID NO:1444:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 499 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

```

GAATTCGGCC AAAGAGGCCT AGGAAAGGAA AAATTAAAAA CCCTAGATCT CTGGTACACA 60
TAAGTCTGGG TTTGCGATTG CTATTTGTGC TGGGCGAGTG TGATTGAGAC TGACATTGAG 120
GAAAGAAGCA GCTATGAAGA CCAGGGGGTT CAGCTTTCCA AGACAAAGGC AAGTCTCTGT 180
TCTTTTCTT TTCTGGGGAG TGTCTTGGC AGGTTCTGGG TTTGGACGTT ATTCGGTGAC 240
TGAGGAAACA GAGAAAGGAT CCTTTGTTGT CAATCTGGCA AAGGATCTGG GACTAGCAGA 300
GGGGGAGCTG GCTGCAAGGG GAACCAAGGT GGTTTCCGAT GATAACAAAC AATACCTGCT 360
CCTGGATTCA CATACCGGGA ATTTGCTCAC AAATGAGAAA CTGGACCGAG AGAAGCTGTG 420
TGGCCCTAAA GAGCCCTGTA TGCTGTATTT CCAAATTTTA ATGGATGATC CCTTTCAGAT 480
TTACAGGGCC GAGCTCGAG 499

```

## (2) INFORMATION FOR SEQ ID NO:1445:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

```

GAATTCGGCC AAAGAGGCCT AAAATTGAT TAGAAATGCA AGACTGGATG CCAAGATTGA      60
TTCTAAATTA GGTCAATGTTG TTATGGGTAA CAATGCAGTC TCACCCTATC AGCAAGTGAT      120
TGAAAAGACC AAAAGCCTTT CCTTTAGAAG CCAGATGTTG GCCATGAATA TTGAGAAGAA      180
ACTTAATCAG AATAGCAGGT CAGAGGCTCC TAACTGGGCA ACTCAAGATT CTGGCTTCTA      240
CTGAAGAACC ATAAAGAAA GATGAAAAA AAAACTATCA AAGAAAGATG AAATAATAAA      300
ACTATTATAT AAAGGTGAC TTAATCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1446:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 607 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

```

GAATTCGGCC AAAGAGGCCT AACAGAGGAA ACCACCCTTC AACTGGAAGA TATCATTAAG      60
CAGAGGATAA GAGATCAGGC TTGGGATGAT GTAGTACGTA AAGAAAAACC TAAAGAGGAT      120
GCATATGAAT ATAAAAAGCG TTAAACCTTA GACCATGAGA AGAGTAAATT GAGCCTTGCT      180
GAAATTTATG AACAGGAGTA CATCAAACTC AACCAGCAA AAACAGCAGA AGAAGAAAAT      240
CCAGAACATG TAGAAATTCA GAAGATGATG GATTCCCTCT TCTTAAATTT GGATGCCNTC      300
TCAAACTTCC ACTTTATCCC TAAACCGCCT GTACCAGAGA TTAAAGTTGT GTCAAATCTG      360
CCAGCCATAA CCATGGAGGA AGTAGCCCA GTAGTGTGTA GTGATGCAGC TCTCCTGGCC      420
CCAGAGGAGA TCAAGGAGAA AAATAAGCT GGACATATAA AACAGCTGC TGAAAAACA      480
GCTACAGAAC AACTCGAGGT GTGGGAAAA GAAAGAGAGA TCAGATTGTT ACTGTGTCTG      540
TATAGAAAGA AGTAGACATA GGAGACTCCA TTTGTTCTG TACTAAGAAA AATTCTTCTG      600
CCTCGAG

```

## (2) INFORMATION FOR SEQ ID NO:1447:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

```

CTGCTGCAGC AATATTCAGA TTGAAAAAAA TAGGTTTGGG TTCACTGAGT TTAAAGGGAT      60
GATGATAAAA AGGAGGTTCT TCTTCCTCTT CATCCGAAAC ATGAGGTTTA TTCATTATTA      120
CATCATCATC TTCTTTACTC TGTGCGATCT GTTTACATTT CTCAGTTAGT TCTTCTATAG      180
TAGCTCCTCC TGACTTTTGA GCAACTTTCT CTTCTATAGT AGGTGGAGGT GCAGGCTTTA      240
GGTTTGGTGG TAAAGGGACA CCAGCCTTAG CACACATGGC AGCTGCATTA GCTTTGGCTA      300
TTTCAAGTAA TTGAGCCTTA TCCAAATCTG TCAGACGTTT GGTGATCTG CCTCGTTCAG      360

```

AAGACCTGCTCTTTTACGA CGGATGGGAG ATCTGCTAAA CCTTTCTT AAGGGTGTTC 420  
 TTGATCGCCT TAATCTGACT GGTGAGTAGG CCTCTTTAGC CGAATTC 467

(2) INFORMATION FOR SEQ ID NO:1448:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 128 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

GAATTCGGCC AAAGAGGCCT AGACACTTAT AGGCTTTTGA AGAAGCATTG ATCAATTGTC 60  
 AAACCTTAGTG CTACATCAGA CTGTGGAGCG TATTCATGTG GGCAAAAAAT ACGGTGATAT 120  
 TCCTCGAG 128

(2) INFORMATION FOR SEQ ID NO:1449:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 314 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

GAATTCGGCC ACNGAGGCCT ATTAAATGA AAATNATTG AATGTTTAAT ACTCTTCCCT 60  
 TCTTCAATTG TAGAAACATT ACCCTTTTGC ACTATCTCAT CACTATTGTG GAAAATAAGT 120  
 ACCCCAGTGT TCTCAATCTA AATGAAGAAT TGCGAGATAT TCCTCAAGCT GCGAAAGTAA 180  
 ACATGACTGA GCTGGACAAA GAAATAAGTA CCTTGAGAAG TGGCTTGAAA GCAGTAGAGA 240  
 CAGAGCTGGA ATATCAGAAG TCTCAGCCCC CACAGCCCGG AGATAAGTTT GTGTCTGTTG 300  
 TCAGCCATCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:1450:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 432 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

GGAATTCGGC CAAAGAGGCC TAGTGGTTTT CCCAGGAGGA AAGAGAGCTG CAGGGATACA 60  
 GATGCCTTCC TGAGCAGAGA AAATAGAATA CTTGAGCCAA TTTTCATGTA AAATGGATTA 120  
 TTTTCTGGC GTTTCCTGTC CTTCAAGTAA AAGGTTCTGG AATGAGTACT TCACTGCTGT 180  
 AATGGAGACA CTAATATTTT ATGAATGCAG TTTTACAGTT TGCAGTAATG CCAGGCCTTT 240  
 GGCTGTTTTT CATTAGATGG TGCCTTGGC TGAAGCATA TACTCTTGTA GCTTTGATT 300  
 TAAATTTAAC TTTCAAGTTG AAAGAGCAGT GACTCATCCA AAGGACAGGT GATATTTATT 360  
 TATTTTCTCT TGAAAATGCA GCACGGGTAT GTTGTATCA CACGTTTAGG GGAATTGCCA 420  
 CACTTCCTCG AG 432

## (2) INFORMATION FOR SEQ ID NO:1451:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

```

GAATTCGGCC AAAGAGGCCT AGGATTGAAC GCTTTCACCC TGTGCCCCGC GCCTGGCGTA      60
ACGCGTGGCC CCAGACCACA CGCTGTAACC CGGGGTGAGA GGGAGTGAGG TGGGACTTCG      120
TACCGGACCC GGAGCGCCGG CCTCGCCCGC GCGGCAGCG TTTACTGTGG GGAGTGCTCA      180
CTCAGCCTAG GCGGCCCCGG GAGGACTGCC GGGAGGAGGG AGTCGGCCTT GAATTGAGGC      240
CTCAGCCTTG AATAGGGTAG GGAGGCAAGC CTAGCCGAGA GTT'AGCACT AGCAAAAGCC      300
TGGAGGCACC AGGGTCTGCC CTAAGAACTG CAGCGCCTCT GCTCTGGCTG GGATTTAACG      360
CATTACGTCT CTGCTGTTTA TAGGTGTTGT GTTTGGTCTT ACGACTTCGT ATTCTATAGT      420
TTTTATTAT TCCTGTTTTC TGAATTTTCC CACTTTGCTC GAG                          463

```

## (2) INFORMATION FOR SEQ ID NO:1452:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

```

GAATTCGGCC AAAGAGGCCT AATGCAAGTC TGGACCGTTT AAAAGCTGGT AATTAAACAC      60
TTTATTCAT ATCAGAATAA AAGTCAACTA GTTGAATATT TCTAGGTGAG ATGTGGTACT      120
ACTTTTTTTT TNGCTGTTAT TTTATGCTG TATCTAAAAT ATCTTACTGC ACTCTTTTTT      180
CAGGTTGCAG CAGATCCTTG AGTTTGAAC CTGACGGGCA AATCAGAGCT TCTTCCTCAT      240
GGCAGTCGGT CAATGAGAGT GGAGACCAAG TTCACTGGTC TCCTGGCCAA GCCCGACTTC      300
AGGACCAAGG CCCATCATGG GCTTCGGGCG ACAGTAGCAA CAACCACAAA CCACGAGAGT      360
GGCTGGAGAT CGATTGCGG GAGAAAAAGA AAATAACAGG ACTCGAG                          407

```

## (2) INFORMATION FOR SEQ ID NO:1453:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

```

GAATTCGGCC AAAGAGGCCT ACGGCCAAAG AGGCCTATAG GCCTCTTTGG CCGGAAATCA      60
TGGTGTTATA GATCAAAAGA TAAAAGTTTC ACAGAAGAGG TGGGATTGTA ACTAAGCTGT      120
TCATGCTCAG TAAGATTAGA GGAGGTGAAG CAAATGGGGG AATGTGTGCC AGAAGAGGAC      180
AGGTGCAAAG ATAAGCACTG GTGCTTGATC TTGACTGAAT TTTCAACCAA ACCAGCTGAC      240
TCTCAGGATA GTTGAAGGTC ACTTTCTGCT GTTTAAAGAA AGATTCTAAA GTTACTTAAG      300
AAATATTGGA CAAAAGACTC AAAAGGAAGG ATTCCAATTA CAATATAAAT AAAGTAAGAA      360

```

ACCTCGA

368

## (2) INFORMATION FOR SEQ ID NO:1454:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 618 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

```

GAATTCGGCC TTCATGGCCT ACCGTGCTCT ATGCTGATCC TTTTCTCGT GAGAAAACGC      60
TGGCCTGTTA TTATTAGCTA AGGTCACACC CGCTGGGCAG CTCCTGGGAT TTTTGGATTC      120
CTCCCCACTC CAGAGGGAAG GCTATTCTA GTGGCTTCTT TTCTTTGAGT CCTCCCTTCT      180
GTCTGTCTCT CTCCTGTTCC TCCTCTTTAC CAGTAGGGCT TCCTCAATGC TGACAGCCCT      240
GTGAAAAAAG GGGAGACATG CCGAGCTCCG GCAGGAAACT GCTGGCCCAG GACCTGGCTT      300
CTGGGGCACA AAGGAGAATT TCTGTGTTG GAAAAGTACA GACTGAGCAG GTGACCCCG      360
CACAGCCCCT TGGGGGAAAC ACTTGTGCCC TTTGAGTCTG ACTGATATAA ACACAGACTC      420
TCTTGACTGT CCCATAAAGG CCAAAGCCAG AGAACCTCAG AAAGGGACTT GCAAATTGTG      480
AGTGAGGCAT ATCAGCTGGT GCTTTCTTTT CTCTGTGGGC TGCCATTTAT GAATCTCTTG      540
GTTTCTCTCT GTCTCTGTCC CTCCACTTTT CTCTCCTTTG CTGGTGTGTG CATTCCCTCT      600
GACGCGCTGG CTCTCGAG                                     618

```

## (2) INFORMATION FOR SEQ ID NO:1455:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

```

GAATTCGGCC TTCATGGCCT AGCCTTTTGT AAATCAGGA AAGACAAAGG TTCAATTACA      60
CCACTTTTGT CAATAAGCAA ACCAGGTATT TTTTCTTCT CCTGTTGTCT GGATATGGCA      120
ATAAATTTT TAAATTGCTG TGAGAACCCA TATATGAAA GAGAGGAGTT GAATTGTGTG      180
TGCCTTTTAT GTCTTGAGAT TTATATGTGG AAAAGACGAC ATCTACTTCA AACTGTATTT      240
TTTTCGTTT TTTTCTTTT TGGGAAGGG GGGAGAACGG GGTCTTGCTC TGTCGCCAG      300
GCTGAACGAG AG                                     312

```

## (2) INFORMATION FOR SEQ ID NO:1456:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

```

GAATTCGCCT TCATGGCCTA GCTTAATCTT ACAGTCATTT AAAATAATTT CAGAAATGTT      60
CCTTTCATAC CATTGTCTCC ACCCCCAAAC CAGCTTACTA AAAATGGCTT AGGATTTGTT      120

```



```

TTCAGTCCTT  TTTTCCTC  TCCCCTGCTC  CCAGACAAGG  GTGTG  C  AATACTGTAT  180
TCAGAAGTTA  CTTGGGTTAG  TTCTTTTTTT  CCGATCTTTC  AGTGTGATTA  TTTTATTCAT  240
TTGAAATACA  ATTGGATTCA  TTCGTTTCCG  TATGCTTTCA  GTTTTAGCTT  TTTTCCACTA  300
TCTTTGTTGA  TATAATTGCA  TTTTGTGATA  GGGGGATATT  AATATACTTC  ACAAAGTCAG  360
AATAACATAA  GGGTTTACTC  AGATGTAACC  TGTTATCTTA  GCCCGTGATC  TCGAG  415

```

## (2) INFORMATION FOR SEQ ID NO:1457:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

```

GAATTCGGCC  TTCATGGCCT  ACATTTTCT  ATTGATATAA  AAATGTTAG  AGAAATATAC  60
AGTTGTATAT  TTCCCCCTT  TATACAGAAA  TTTTACAATA  ATTTCAGATT  TTTCTGAGTT  120
TTTTCAGATT  TTTGATTCTA  TAATATGAGA  TTATTCTTTC  TTCCTCTTAT  TTTTTTAGGT  180
TATTTATTTT  TTCTTTTCTT  TTTAATTGTC  TCATACAGGT  TTAATCTCGA  G  231

```

## (2) INFORMATION FOR SEQ ID NO:1458:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

```

GAATTCTGTT  CATATTTTAA  AATGTTCCCT  TTTTCAACA  TTCAGCAAAA  TATTATGTGC  60
TAGGAACCTCT  CCCAGACGCT  TGTTAACATC  TATGAATACA  ACAAAGATTC  TGCCCTCCTG  120
GGCCTCTTTT  CTGATGGGGA  AGCAAAAATC  TCGAG  155

```

## (2) INFORMATION FOR SEQ ID NO:1459:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: cDNA

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

```

GAATTCGGCC  TTCATGGCCT  AGGTGACTAA  GTACAAAAAA  ATAGTTTCT  CATTGTATTC  60
AAAATAGTGA  GTAGGTTCCC  TGGATAATAC  ACAGTGGTAG  TTGACATATT  TTCTCAAAAC  120
ACAACCAGAA  AACCACCTTC  CGTATTTGT  AAATCACCTT  TCAAGGGAAA  AAGTGAACAC  180
GTATTCCTTG  TATTTCTAGT  TTGATTACCA  AACCTGATGT  TACAAAGAAA  CCTCCGTTCT  240
GTAGACAGAA  TTTCTTTTAT  TTTTCTTCTT  TTAATCTCTA  CAATCACTTT  CCCAGTGCCA  300
CCACCGCTCG  AG  312

```

## (2) INFORMATION FOR SEQ ID NO:1460:

- (i) UENCE CHARACTERISTICS:  
 (A) LENGTH: 459 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

```
GAATTCGGCC TTCATGGCCT AGTCTCCCTC GGCCTGTGCC GCCGCCGACG CCGCTTGTGG      60
GCCCCACTCC GCTCTGTCTG CTTCCGCCACC TTCTCCCCGA GCACTGCCCG GCCGGCCGCC      120
ATGGCTAACG TGGCTGACAC GAAGCTGTAC GACATCCTGG CGTCCCGCCG GCGGCCAGCG      180
AGAACGAGCT GAAGAAGGCA TACAGAAAGT TAGCCAAGGA ATATCATCCT GATAAGAATC      240
CAAATGCAGG AGACAAATTT AAAGAAATAA GTTTTGCATA TGAAGTACTA TCAAATCCTG      300
AGAAGCGTGA GTTATATGAC AGATACGGAG AGCAAGGTCT TCGGGAAGGC AGCGGCGGAG      360
GTGGTGGCAT GGATGATATT TTCTCTACA TTTTGGTGG GGGATTGTTC GGCTTCATGG      420
GCAATCAGAG TAGAAGTCGA AATGGCAGAA GAACTCGAG                               459
```

(2) INFORMATION FOR SEQ ID NO:1461:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 511 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO.1461:

```
GAATTCGGCC TTCATGGCCT ACGAGATCAA GGACAAGAGG CAGCTTATAG ACAACCGCAA      60
GCTCATTGAG ACGCAAATGG AACGGTTCAA AGTTGTGGAA CGAGAGACCA AAACCAAAGC      120
TTACAGCAAA GAGGGCCTGG GCCTGGCCCA GAAGGTAGAT CCTGCCCAGA AGGAGAAGGA      180
AGAGGTGGC CAGTGGCTCA CGAATACCAT CGACACGCTC AACATGCAGG TGGACCAGTT      240
TGAGAGTGAA GTGGAGTCAC TGTCAGTGCA GACACGCAAG AAGAAGGGCG ACAAGGATAA      300
GCAGGACCGG ATTGAGGGCT TGAAGCGGCA CATCGAGAAG CACCGCTACC ACGTGCGCAT      360
GCTAGAGACC ATCCTGCGCA TGCTGGACAA TGACTCCATC CTCGTTGACG CCATCCGCAA      420
GATCAAGGAC GACGTTGAGT ACTATGTTGA CTCATCCCAG GACCCCGACT TCGAGGAGAA      480
CGAGTTTCTC TACGATGACC TGGACCTCGA G                               511
```

(2) INFORMATION FOR SEQ ID NO:1462:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 130 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

```
GAATTCGGCC AAAGAGGCCT ATTTGTTTTG TGGTTTTAAA ATTTTCTT CGCATAAAGG      60
GTAACATCTT GCAACTTGAT TCTTTCACIT CATGATATGC CTTAGATTTC TTTCTTCCC      120
AATACTCGAG                               130
```

(2) INFORMATION FOR SEQ ID NO:1463:

- (i) S CE CHARACTERISTICS:  
 (A) LENGTH: 379 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

```
GAATTCGGCC AAAGAGGCCT ACTTGTNAAG TGCTTTTGAA TTAATAAAAT ATTAGCATAA    60
TTGTGTNTAG TCAGTTGAAC CCACTGTTAC CATTGTTCTT ATCCCATGGG AAGCAGTTGG    120
TTACACGATT CTTATTTTAT AAGAAACAGC TGAGAGGCAC TATGGATTAG TCTTCTGAAG    180
TGAAGGAAAT ATAGATGTCT CCTAAGTGAT AGTTAACCCA TTTTITTTTT TTTTAGGCAT    240
AGAAGCCAGT TCAGGTGCCA TAATATTTAG TGACCAACAT TTTAAAGTAT AGCAGCAACC    300
TGGTTCTTAA ACACAAAGTA AGTTGCCCAT TAACAAATGG CTTTATCTT TAGCATGAAA    360
ACTTCCACA CGTCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1464:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 354 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

```
GAATTCGGCC AAAGAGGCCT ANAANAACCT TTTTCTGGG AGCAAGGTAG TTATTTCAAA    60
GCACAGAAAA AGCGGCGGG GGGCACAGAG AAGCACAGAG AAGCGGGGGC AGTTGCACAG    120
GTAAACATT CATCTTGGCT TTTCTTTTAA AAAGATAAAC TTTGTCCAC GTAAAGAGGA    180
ANACTGCATA GATATTCAAT GAGATTATCT GATTTGTCAC TGTTGCCAAA GAAAAACAA    240
AGGTAATAA CACGAGTTT NNCATTGAGA AGAAAGTATT TCAGGTAAAA ATTAATATT    300
AAGCAACTTT TCTCAGCAGA AGAAATGCCC AAATTCTTAA GGACAGTACT CGAG      354
```

(2) INFORMATION FOR SEQ ID NO:1465:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 229 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

```
GAATTCGGCC AAAGAGGCCT AACTGCTCC AGCTCTGACT CCCTCATCCC TTGCCTGGAC    60
CATGGTAATT GACCCTAGCT GGTCTCCTTT TCTCCTCTCA TCAGTCTCC ACATTGCTGC    120
TGTTTTCATC TTTGTGACAT ACAAATGTGT TGCTTTCCCG TCTAAAACCC TGCTTGTCCT    180
TCCCATTTT GACTGCCTGC CCCAGCAGC CACACACACA AACTCGAG      229
```

(2) INFORMATION FOR SEQ ID NO:1466:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 327 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

```
GAATTCGGCC AAAGAGGCCT ATTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTAAATTTAT    60
AAGGAATAGA AATTTATTGG CTCACAGTTC TGGGGGCTGG GAAGTCCCAG AGTAAGGTGC    120
CAGCGTCTGG TGCAATCCTT CTTGTTGTGT CACTGTGGAA GGTGGAAGGG CAAGAGAGGG    180
CCAAGCTCAT CTTATTATAC CAGCACCCAT TCCAACATCA TCCTCGAAGG ATCCCAATTT    240
TGAAAGAAAA AGCATGTGAG ACACAGAACA GGCGAGAGAG TGAGGGCCCC GCATGCCCCC    300
AAGTCCCAC CACCGCACCT GCTCGAG                                     327
```

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 403 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

```
GAATTCGGCC TTCATGGCCT AGAGAGAGAG AGAGAAAAGG AGGGGGTGGT GGAGAAGCGG    60
GAGCGAAGGA AAGGAGGCAA AAGGCAAAGT GAAGGAAAGC TGGATAGCTC GGCCTCTCCA    120
AACTGATTGA TTAGTCATGA TCCCCGAGT TTAAACAGGG ACTCATTCAA TTGGGAAGGT    180
GGAGCGCTGG GGAGCAGATT AGCATACGCT TGTTTACTCA TCTTCTGAGG GATTTTTTCC    240
CCCTCTTTCC TTTCATTTTG AGAAGAAGGA GGGAGGGGAG GGGGGACTTG GGGGGGAGA    300
AGGGGGCTGT GGCTTGTGTT ATAAAGGACG CAAAAAATAA ATAAATTAGA GCATCTTTTG    360
GGGGGAGGGA ATTCAGCGGA TCAGTCTTAA GATGGAGCTC GAG                                     403
```

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 329 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

```
GAATTCGGCC TTCATGGCCT ACACGAGGTC AGACGTCACA CATTGTTTTT TGGCTTGTTT    60
TTTTGAAGTT TTTACGACTT GTCATGAGTC TCGGCCTGGC TTCTGTTTTT CACTGTCCGG    120
AAGAGTGTGG TCCTTCTGCA TTGACCTTC CTTACCCTC ATCCAGTCCT CCCAGTGTGG    180
CCGGTCTCAT TTCGTGTCGT CAGCTGGGTC AGCTGGCTCG GTGTGGAGTT TGGATTTTCC    240
GTGATCCATC CCATGCTTTT TTTTCTTTC TTTCTTTTTT CCTTTTCTTT TCTTTTCTTT    300
TTTTTTCAGT TTTCTCCCCA ACTCTCGAG                                     329
```

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 352 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double

TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

GAATTCGGCC	TTCATGGCCT	ACAGGAAAAT	TCTTCTGGCG	TATTTTCATTC	TGATGTTTAT	60
AGTATATGCC	TTTGAAGTGG	CATCTTGTAT	CACAGCAGCA	ACACAACGAG	ACTTTATGCT	120
AGAGAGGTAC	CAAAACAACA	GCCCTCCAAA	CGATGATGAC	CAGTGGAAAA	ACAATGGAGT	180
CACCAAAACC	TGGGACAGGC	TCATGCTCCA	GGACAATTGC	TGTGGCGTAA	ATGGTCCATC	240
AGACTGGCAA	AAATACACAT	CTGCCTTCCG	GACTGAGAAT	AATGATGCTG	ACTATCCCTG	300
GCCTCGTCAA	TGCTGTGTTA	TGAACAATCT	TAAAGAATCT	CTCACCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 609 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

GAATTCGGCC	TTCATGGCCT	AGAGCCGTCC	TATCAGATTA	TCTTAACAAG	AAAACCAACT	60
GGAAAAAAA	ATGAAATTCC	TTATCTTCGC	ATTTTTCGGT	GGTGTTCACC	TTTATCCCT	120
GTGCTCTGGG	AAAGCTATAT	GCAAGAATGG	CATCTCTAAG	AGGACTTTTG	AAGAAATAAA	180
AGAAGAAATA	GCCAGCTGTG	GAGATGTTGC	TAAAGCAATC	ATCAACCTAG	CTGTTTATGG	240
TAAAGCCCAG	AACAGATCCT	ATGAGCGATT	GGCACTTCTG	GTTGATACTG	TTGGACCCAG	300
ACTGAGTGGC	TCCAAGAACT	AGAAAAAGCC	ATCCAAATTA	TGTACCAAAA	CCTGCAGCAA	360
GATGGGGCTGG	AGAAAGTTCA	CCTGGAGCCA	GTGAGAATAC	CCCACTGGGA	GAGGGGAGAA	420
GAATCAGCTG	TGATGCTGGA	GCCAAGAATT	CATAAGATAG	CCATCCTGGG	TCTTGGCAGC	480
AGCATTGGGA	CTCCTCCAGA	AGGCATTACA	GCAGAAGTTC	TGGTGGTGAC	CTCTTTCGAT	540
GAAGTGCAGA	GAAGGGCCTC	AGAAGCAAGA	GGGAAGATTG	TTGTTTATAA	CCAACCTTAC	600
AACCTCGAG						609

(2) INFORMATION FOR SEQ ID NO:1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCGAGCCTGG	GCAATAGAAT	60
GAGGCTCCAT	CTCATAATAA	TAATAAGCAG	CAGCGGCAGC	TCTGGTAGAT	TTTTTTGTGT	120
GCTTGTCTCT	ATGAAGACTT	AAGCCTGCTC	TTTCAATTTC	AAACCTAGGC	ACTTGGACTA	180
ACTTAAAAGA	TCATGTAAAA	AATTTAATTT	TTGTTTGGTA	TAGATTTAAT	TGTGGTTTTT	240
TTTTTCTCTT	TTAGATATAA	TTGATCCTGT	TGCTTTAGAA	ATTCCATTAT	CCAAAAACCT	300
TCTGGCACAG	ATTAGTGCTC	TTGCTCTTCA	GCTGGATTCA	GAAGATCTTC	ATAATTATTC	360
AGGAAGCCAA	CTATTTGAAA	TGCACGAGAA	AACCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:1472:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 306 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCGGCC TTCATGGCCT ACAGGTTTAA AACTGGTTTT TTGCATACTG CTATATAATT	60
CTCTGTCTCT CTCTGTTTAT CTCTCCCCTC CCTCCCCTCC CCTTCTTCTC CATCTCCATT	120
CTTTTGAATT TCCTCATCCC TCCATCTCAA TCCCGTATCT ACGCACCCCC CCCCCAGGC	180
AAAGCAGTGC TCTGAGTATC ACATCACACA AAAGGAACAA AAGCGAAACA CACAAACAGC	240
CCTCAACTTA CACTTGGTTA CTCAAAAGAA CAAGAGTCAA TGGTACTTGT CCTAGCGTTT	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:1473:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 385 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

GAATTCGGCC TCATGGCCTA CAACTCCGCA GCAAACAACT CCGCAAACGG AAAAAGAACG	60
ACATGATGCA ATCTTCAGGA AAGTAAGAGG CATACTAAAT AAGCTTACTC CTGAAAAGTT	120
TGACAAGCTA TGCCTTGAGC TCCTCAATGT GGGTGTAGAG TCTAAACTCA TCCTTAAAGG	180
GGTCATACTG CTGATTGTGG ACAAAGCCCT AGAAGAGCCA AAGTATAGCT CACTGTATGC	240
TCAGCTATGT CTGCGATTGG CAGAAGATGC ACCAAACTTT GATGGCCCAG CAGCAGAGGG	300
TCAACCAGGA CAGAAGCAAA GCACCACATT CAGACGCCTC CTAATTTCCA AATTACAAGA	360
TGAATTTGAA AACCGAACGC TCGAG	385

(2) INFORMATION FOR SEQ ID NO:1474:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 428 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

GAATTCGGCC TTCATGGCCT AGATCCCCTT ATTTTGCCAA AAAGTGTCAT CAATTCATTT	60
GGATAACTTT TATGTTTTAG GAACGTGGCC TCTCTTTTAA TTAGTGAGAA CTTACAAAAT	120
GGTTCAGAAA GTTTATATTT TTAAAGCTTT CATTCATTGA TATATTGAAC ATCTAAGGCT	180
TAAGTATCTT TCCACTGGGA CAAAAACAGA ATTCTTAAAA ATGAGGAGGA GGGCCCAGTG	240
TGGTGGCTTA CACCTGGAAT TCCAGTGCTT TGGGAGTCCA AGGTAGGAGA ACTGCTTGAG	300
GCCAGGGGTT TGAGACCAGC CTGGGCAACA CAGCAAGACA ACTCTACAAA AAATTAAAAA	360
AACAATCCAG GGCCGAGCAT AGTGGTTCAC ACCTGTAATC CCAGCACTTT AGGAGGCCAA	420
GCCTCGAG	428

(2) INFORMATION FOR SEQ ID NO:1475:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 338 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

GAATTCGGCC TTCATGGCCT ACTGGGATGT ATATGAGAGA CAGTGCTTTC AATTAAATCC	60
TTGGGTATAT TTTTATTAAT TTCCTCCAGA TTTTCTTTT AAGGCCTTTT CTAAGTTATA	120
CTGCATATCA AACTTCCCTG TTATTGAAGG ATATAAGGTA GAAGGTAAAA GCCATTTTCC	180
TATAAGTAAC TTGGGCATTT GCAAAGATTT TTCTCAAGTG CAGTTGTAAC TATACTAAAA	240
TATACTAATA TTGTGTTATG ATATACCTTG CTTTTTTTCT TTTATTTTTT CTTTGTAGAC	300
AGAGTTTTGC TCTTGTTTCC CAGGCTGAAG CGCTCGAG	338

(2) INFORMATION FOR SEQ ID NO:1476:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 346 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

GAATTCGGCC TTCATGGCCT ACAAAGAGCT AGAAGCCATT GAAAGTCGGC TAGAAAAGAC	60
AGAATTCACCT CTAAAAGAGG ATTTAACTAA ACTGAAAACA TTAAGTGTGA TGTTGTAGA	120
TGAACGGAAA ACAATGAGTG AAAAATTAAA GAAACTGAA GATAAATTAC AAGCTGCTTC	180
TTCTCAGCTT CAAGTGGAGC AAAATAAAGT AACAACAGTT ACTGAGAAGT TAATTGAGGA	240
AACTAAAAGG GCGCTCAAGT CCAAACCGA TGTAGAAGAA AAGATGTACA GCGTAACCAA	300
GGAGAGAGAT GATTAAAAA ACAAATTGAA AGCGGCAGAA CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:1477:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 298 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

GAATTCGGCC TTCATGGCCT ACAGGTTTTT ATTTTATATT ATTTTCCTTT AGCCTGAAAA	60
ATTTATTTAT TTTTCTCTT AGTACAAGTC TGCTGGTGGT AAATTCTCTT AGTTTGTGTT	120
TATTGAAAGA TATTTTATT TTGCCTTCAT TCCAGAAGGT TGCTTTTGCT GGATATAGGA	180
TTCTACAAC TTTGCCTTTA ACATGTTATG GATGCCATTC CTCTGTCTTT TAGCTTCCAT	240
TGTTTCTGAT GCTAAATCTT CAGTCATTTT ATCATTGATC CTCTGTAATG TACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1478:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 107 base pairs  
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

GCGAACTAGC CCAAATGCAC CTAGGAACAT TGTGCTTCA GGACCAGTTA TTTCTGACCT	60
TCCAGTTGTT CCTGACTGTG AAGGGTGACC GCTTCCCGGG ACTCGAG	107

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 340 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

GAATTCGGCC TTCATGGCCT ACTTATATTC TTTATTATTA TTTAGTACAA AAATAGATTC	60
CCAGTAGATA TCCACAAGCA ATATTAGCAG GGCTTCTGTT TCTAAGTGAC CACAGACTAA	120
CCCTTTCTAG GCTTTAACAT TGTAATAAAT CCTATAAACA GTTTGATTTT TTAAGATGAT	180
TTTTGATTTG AAGAGACAGG CTTTACATAA GCCTTCATTC CTTCAAAAGG TCCTGACAAA	240
ATACTTGGGT TTTTTCTCT TTTTTCATT CTGGTATGCT TTGCAGCATT TCAGCTGCTT	300
TGGTGGGGAC ACAGATAACC CCTTCGCTTC CAGACTCGAG	340

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 233 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

GCGATTATTG TAAGTTGACA ATTTATAATT GTATAAAAGT ATGAGGTACA AAGTGATGTT	60
ATAGCTTAAG AATACAGTAT GGTATGATTA AATCAAGTTA TTAACCTATC CTTACGTTA	120
AATGCTTAAA TTTTGTGATG AGAACATTTG AAATTTACTC TTGGAAGGTA AAAAAAATC	180
TCAGGACCCC CCAAATTAAA GGCATGAAGC TGAATTGTGC AACAATCCTC GAG	233

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 266 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:



```

GAATTCGGCC TGGCCT AGATAACTAT TGCTCCAGT ACCC 3 CTATCTCACA 60
TAACTTTGAT ATATATTATT TTTATTATCG TTTATTAAGT GTCTAATTC CATTGTGAAG 120
TCTCCTTGGA CCTATAAGGC TGAAATAAAA TAATTTAAAA TTTATTTTCT TATTGTTTCT 180
AATTC AATTT CATTATAGTT AATGCAAGTG GTCATTGTGC TATTGAGTTT GGTACTTTGG 240
AGGTTTCTTT TTCTGGCTAT CTCGAG 266

```

## (2) INFORMATION FOR SEQ ID NO:1482:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

```

GAATTCGGCC TTCATGGCCT AAGAAATGTT CACTTTTCCA ACTTAAAAGG ATTTTAAAA 60
ATACAAACAT AATTGACCTA CCTGGTTCAA AGAACAGAAG TGAGGAGAAC TTGCTTAAAG 120
GTATTGATGT TATATTTTCT CTGACTGAG TGCTTGAAAA AAAATTTTAT TGAACATATG 180
TTCTCCTTCC GTGGCTTTT TGTCTTTGCT TTTTGTGTTT GTTTTGTGTT TTTTCTTT 240
GAGATGGAGT CTCACTCTCT GCTCGAG 267

```

## (2) INFORMATION FOR SEQ ID NO:1483:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 242 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

```

GAATTCGGCC TTCATGGCCT AAATTAGCAT CTAGTGTAC AGGTAAAAGA ATTTCAGGAC 60
CAGGTTTAAA CTTTATTTTA AATATTTTTA TACTTAGGTC TCTTTTTCCT GCCTCTCCCC 120
AAAGAAGAGC CACTGGCCTT AGTTGTTTGA GCTTACTGCT TATATTATAG AGTGTAATA 180
GGTAAC TAGA GACTAA AAT TTATTAACCA GCATGTTTGG TATATTTAAA GCAGTTCTCG 240
AG 242

```

## (2) INFORMATION FOR SEQ ID NO:1484:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

```

GAATTCGGCC TTCATGGCCT ACAGAGTGTG GTTCTGTAG CAACACTTCT CATGACCATC 60
TGTTTTGTGT TTATGATGAT TTTTTCAGGT CTGTTGGTCA ATCTCACAAC CATTGCATCT 120
TGGCTGTGAT GGCTTCAGTA CTTGAGCATT CCACGATATG GATTACGGC TTGCAGCAT 180
AATGAATTTT TGGGACAAAA CTTCTGCCCA GGACTCAATG CAACAGGAAA CAATCCTTGT 240
AACTATGCAA CATGTACTGG CGAAGAATAT TTGGTAAAGC AAGGGCTCGA G 291

```

## (2) INFORMATION FOR SEQ ID NO:1485:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

GAATTCGGCC TTCATGGCCT AGTAATTTT GATAGTAAGG GCTTTTATT GTCATTTT	60
GTTAATCGTT TCCTGCTGT TTTGATTTC TTTGTTCCCT CTCTCCTCG CTTGGTATCA	120
TCTTTGCAAT TTGATAATTT TTGTTGTGAT ATACTTTGAT TCTTCTATT TATCTCTTCT	180
GAATCTAATA TTAGTTTTT TTATCTTTC TGTATCTATT ATTAGTTTT TTTCTTTGTG	240
GTTATCATGA GGCTTCCACT CGAG	264

## (2) INFORMATION FOR SEQ ID NO:1486:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

GAATTCGGCC TTCATGGCCT ACCAGTGCCT TCCTCTCCC TATATTCTGT GTGTCTTAAC	60
GGAATTATTT TTCCAAATCA TTGTGTGCAA AGAACTAAT GACATCATAA GTATGATTC	120
TGTACACATT TTAGTTGTAA TTGCTAGGTT TTCCAAGATT TCACAGTCAT CAAGTCATCT	180
GTTCCAGAC ATCCCAACAA GTACTTATCA AGTGTCTCCA TCTGCTGCCT TCATCTCTCT	240
CAGGTGCCAT TCCAGTGACA TTGCTATAGC CTCTTGCTGT ACCCCCTCG AG	292

## (2) INFORMATION FOR SEQ ID NO:1487:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 261 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

GAATTCGGCC TTCATGGCCT AATGGATATA GAATCCAGG TTGATAAACA TTTTCTGTCA	60
CAACTTTACA ACTGAAGGCA TTGCCCTTTT GTCTTTTACC GTTCATTGA TAAAAAGTCT	120
GGTGGTAATC TAATTCTTAC ACCTTTGTAG GTGAGCATTT TTTCTTTCC TGTGACACAT	180
TTGTGATTAT CTGATCCTTA GAGATCTGAA GTTTTATCAT TTGTATCTAT GAGATCTTTT	240
CCCATCCTCC TGGTGCTCGA G	261

## (2) INFORMATION FOR SEQ ID NO:1488:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 488 base pairs
  - (B) TYPE: nucleic acid

STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

GAATTCGGCC	TTCATGGCCT	AATTTTCTGT	ATATTTTAC	ATGAATTCA	GTACTATATT	60
GAACAGCTAT	GTTTAAGGAT	AATCAAAAGA	TGACTGTGAC	AGGGAGAATT	TGGAAATATT	120
AGCCCAAGTC	TAGTCAATTG	TGATTGTTGT	TGCGTTGGTA	CTAGTTTAAA	TTGGGGCTAA	180
ATTTAGAGCC	ACTGGGACTG	AGTACCTCGG	TTGATCTCCA	ATGATTCCAA	TTGCTAAAAA	240
GTAAAGGGCA	ACCACACATA	CGTACCAATT	CTGAAGTCCT	AGGAAATTTT	TAAAAGAATG	300
TAAGAGAATA	AGAAAATGTA	AAAGGGAGAA	GAGTTTATAT	GTGATGACGT	AAGTTTTAGA	360
GTTATTTACT	TTGTAAGTGG	ACCTTCTCTG	CTTCTTCCAA	TGTGTTTCATT	AAGACCCCTGC	420
TGAAAAATGA	CCTTCCAAC	CCCCTGAGTA	ATTATTAAAG	ACCCTTTCAT	CTTACCAACC	480
CTCTCGAG						488

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 238 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

GAATTCGGCC	TTCATGGCCT	AGTCTCAAAA	AAAAAATCAA	AATAAAAGTA	AAAGTAAGAA	60
GATGGAAATT	TGCTTAGCTG	TGAAAGGAAA	GGCGATCTGT	CTGATGTCCT	GTGTTTGGTG	120
CCTAGGTGGG	CTTGGTGCTT	GCATTTCTCTG	CGTTGCAGTG	TCAGGATTTT	TCAGGGATCA	180
GCCTTGGCAC	TGGAGACCTT	CACATTTTCC	ATCTGGTTAC	TATGGCACAC	AACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 263 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

GAATTACTCT	GGAAGATATG	CTCTATGCTG	CTTCATCCAT	AAAGAGTAAT	TATTTGGTGT	60
TCATGGCGGA	ACTGTTCTGG	TGGTTTGAAG	TGGTGAAGCC	GTCTTTTGTA	CAGCCTCGTG	120
TTGTTTCGTCC	ACAAGGAGCT	GAACCTGTAA	AAGATATGCC	TTCAATTCCT	GTCTTGAATG	180
CTGCCAAAAG	AAATGTCTTA	GATAGTAGTT	CTGACTTCCC	TTCAAGTGGG	GAAGGAGCTA	240
CATTTACACA	GTCTCATCTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:1491:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 257 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: double  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

```
GCGATTGAAT TCTAGACCTG CCTCGAGCTC ACACCTGGAT TATCTCAGTA GTTTCCTAAC      60
TGGTTTCCTT GTTTCATTC TTGCCTCCTT CTGTCTACTC TCAATATAAC AGCTAGAACA      120
ATCCTTTTAC AATGGAATTC AGATCATGTT TACCCCTCTG TTCAAATTCT CCAGTGACTT      180
TCCAGTTTTT ACATGATCTG GCTCCTACTA CCTGTCTCAC TGTGTTTCCT ACTACTCTCC      240
TGCCCTTTCT CCTCGAG                                     257
```

(2) INFORMATION FOR SEQ ID NO:1492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

```
GAATTAAAGA GGGCGATATC ATCACACTCA CTAACCAAAT TGATGAGAAC TGGTATGAGG      60
GGATGCTGCA TGGCCATTCA GGCTTCTTCC CCATCAATTA TGTGAAATTT CTGGTTGCCC      120
TGCCCCATTA GGATGTTATG CTGGCTGGCT CGCCTCCTCT TGACCCAGAT AGTTACGGTT      180
AACCACTGCT TTGGCAATGC TGCTTATAAC ACATCCCAAG TGCAGGCCGC AGTGGTCCAC      240
GTCATCCAGC CCCACCAAGT GACTTTGGTT GACTTGTGGG CTCCCACAGG ACTCGAG       297
```

(2) INFORMATION FOR SEQ ID NO:1493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```
GAATTCGGCC TTCATGGCCT AAAAAGAAAG AAAAAGAAAA GAAAAACCT TGGAGAAGTA      60
AGGGATTCTG TAAAAATTT CCCCAATTTT ACTAGAGAGA TTGACATATA AATTAGAAA      120
ATTCAGATAA CCTATGTAAG ATGCTATGTA AGACAACCAT TGCAGAGACA CAAAGTAATC      180
AGATTCTTGA AGGTCAATGC AAAAGAAAAA AATATTAAAG GCACTCGAG       229
```

(2) INFORMATION FOR SEQ ID NO:1494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

```
GAATTCGGCC TTCATCTGAC AATTAAAAAC ACTACCTTAG TTTGTTTTTC TGTAATTGAA      60
```

```

TTTGCACAGT      TTTTAC TTGAATTAGT CTTTTTATAT ATAT      C AGAAGTACTT      120
AAATAAATCT TCCCTTAAGT ATCAAAAGCA AAAGAATAAC ATTCATAGAA GTCTAACATG      180
TTCAAACTGT TAAATATACT ACAATTGTTC ATTCACATTA TAAATGCAGC TAAAATGACT      240
AACCTTTCAG ATCAACCCCT CGAG                                          264

```

## (2) INFORMATION FOR SEQ ID NO:1495:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 190 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

```

GAATTCGGCC TTCATGGCCT ACCTTCCTTC CTCCTTCCT TCCTTTCCTT CCTTCTTCC      60
TTCCTTCCTT TCCTTCCTTT CTTTCCTTC CTCTCTTCT CTCTTCTGT CATGGTCTGG      120
CTCTGTTACC CAGGCTGGAG TGCAGGGGTG CAATCTCAGC TCGCTGCAAC TTCTTCCCCC      180
CCAACTCGAG                                          190

```

## (2) INFORMATION FOR SEQ ID NO:1496:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 232 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

```

GGCCTTCATG GCCTACTAAG CTATTTGATT CTAAGTGAAT ATGTTATCTC TTATTAGAGG      60
ATATGTTAAT TTTCTGTCAT TTTATTCATT TATTAACCTA ACATCTCTGA TTGCCTACCA      120
TGTGTCAGGC TCTGTACTAA GGATTGAGGA CCCAAAGATG AACAAAACAT GGGGCCTAAT      180
TCAAAGATTT CACAACTGG AGAGAAAGTC AGCCACATAC AAAAGCCTCG AG      232

```

## (2) INFORMATION FOR SEQ ID NO:1497:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 152 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: double
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

```

GTAGAATTGT ACAGTGCTTA TGAGTTATGC ATGTGTTTCCT GGTCTTTGTT CTAGGATTTT      60
TTTTTTTTTT TGATTGCTGC TCCAGTTGCC TTACTTACTT TGACATTGGA GTTGACCACA      120
TGATGGTGTT CCACACTTCC CCTAGGCTCG AG                                          152

```

## (2) INFORMATION FOR SEQ ID NO:1498:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 254 base pairs

- (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

```
GCGATTGAAT TCTAGACCTG CCTCGATCTC TTGTATTGAG TATTTTGTGG GGGAGGTACT    60
TTGAAACTGT GTAAATATAC CATTTCTCAT TAAACTTTTC AATTTATTCC CTTATTTAGA    120
TGCGTATGAA CTCATGGCTT CTTGTTTAT TTGATGGATC CAAATCTGTT AATATCCTTA    180
CTGATTTGGA TGCTCAGACT GCCCCAGATT TGGCCAGTGG AAGCCCTTC AGGCTTGCTC    240
CCATGTCCCT CGAG                                254
```

(2) INFORMATION FOR SEQ ID NO:1499:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 658 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

```
GAATTCGGCC TTTCATGGCC TAGAGAGCGC GGTGGGCTGC CATTTAAACG CGGCCATCGG    60
TCCGGCCATC ATCCCTTCA CGGTACTAGA CTCCGGGATG GTGAGATCCT TCTCATCCTT    120
TGGGGGCCGA CCCCCTTCC GGGGACTTTG CTCTTGGGCT CTTTTCAGAG GGGATTTGGA    180
GCCTCTCTCT GAAGAGCCTG AAGACACCCT CTTCTTTCCT TCTCCCATGT TCTTCTTCAC    240
CTTCCCTTCA GACAGGCTAA GTTTGCGCTT CTCATCACCT GAGTTTGGCC TACTTCTCTC    300
CTCACTGGAA TTACGTCGAT TCTTGTCATC AGAAGAATTG TGGGATGACG TCTGGTCTTT    360
CCCTTTGGCT CTCCTGTAGG CCATGAAGGC CCGGCCTTCA TGGCCTACCA TTTCTTACAC    420
ACACTGCCAG AGATACTCTA GGCATGTAAA GCACAAACAT ACATATAAAA TCTGCGGGCT    480
TCAAAAATA TAAGTAGGAT GTCATCTATA CTGTCATACA CTTTGTTTTT TATCACTTAC    540
TTAATGTTAT ATCTTGATA TTGTATTACC CTGGGTATTA AAAAGAACTC CTTTCACATT    600
TTAAAATAAC AATCTGAGCA CTTCAATAAT CCAATGCGT ATCTCCAGTC TGCTCGAG    658
```

(2) INFORMATION FOR SEQ ID NO:1500:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 113 base pairs  
 (B) TYPE: nucleic acid  
 (C) STRANDEDNESS: double  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

```
GAATTCTAGA CCTGTCTCGA GAAACCAGAG GACTTTTCTG CTTTGTGTTT TCTTTTAGGA    60
GGTAATAAAA CCGTGAATTT ATTTAAATGC TAATGTGTAG GATCTCACTC GAG            113
```

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145,

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ

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NO:1253, SEQ ID NO:1254, SEQ ID NO:1255, SEQ ID NO:1256, SEQ ID

[illegible]

NO:1393, SEQ ID NO:1394, SEQ ID NO:1395, SEQ ID NO:1396, SEQ ID NO:1397, SEQ ID NO:1398, SEQ ID NO:1399, SEQ ID NO:1400, SEQ ID NO:1401, SEQ ID NO:1402, SEQ ID NO:1403, SEQ ID NO:1404, SEQ ID NO:1405, SEQ ID NO:1406, SEQ ID NO:1407, SEQ ID NO:1408, SEQ ID NO:1409, SEQ ID NO:1410, SEQ ID NO:1411, SEQ ID NO:1412, SEQ ID NO:1413, SEQ ID NO:1414, SEQ ID NO:1415, SEQ ID NO:1416, SEQ ID NO:1417, SEQ ID NO:1418, SEQ ID NO:1419, SEQ ID NO:1420, SEQ ID NO:1421, SEQ ID NO:1422, SEQ ID NO:1423, SEQ ID NO:1424, SEQ ID NO:1425, SEQ ID NO:1426, SEQ ID NO:1427, SEQ ID NO:1428, SEQ ID NO:1429, SEQ ID NO:1430, SEQ ID NO:1431, SEQ ID NO:1432, SEQ ID NO:1433, SEQ ID NO:1434, SEQ ID NO:1435, SEQ ID NO:1436, SEQ ID NO:1437, SEQ ID NO:1438, SEQ ID NO:1439, SEQ ID NO:1440, SEQ ID NO:1441, SEQ ID NO:1442, SEQ ID NO:1443, SEQ ID NO:1444, SEQ ID NO:1445, SEQ ID NO:1446, SEQ ID NO:1447, SEQ ID NO:1448, SEQ ID NO:1449, SEQ ID NO:1450, SEQ ID NO:1451, SEQ ID NO:1452, SEQ ID NO:1453, SEQ ID NO:1454, SEQ ID NO:1455, SEQ ID NO:1456, SEQ ID NO:1457, SEQ ID NO:1458, SEQ ID NO:1459, SEQ ID NO:1460, SEQ ID NO:1461, SEQ ID NO:1462, SEQ ID NO:1463, SEQ ID NO:1464, SEQ ID NO:1465, SEQ ID NO:1466, SEQ ID NO:1467, SEQ ID NO:1468, SEQ ID NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;

or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ

ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID

NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235, SEQ ID NO:236, SEQ ID NO:237, SEQ ID NO:238, SEQ ID NO:239, SEQ ID NO:240, SEQ ID NO:241, SEQ ID NO:242, SEQ ID NO:243, SEQ ID NO:244, SEQ ID NO:245, SEQ ID NO:246, SEQ ID NO:247, SEQ ID NO:248, SEQ ID NO:249, SEQ ID NO:250, SEQ ID NO:251, SEQ ID NO:252, SEQ ID NO:253, SEQ ID NO:254, SEQ ID NO:255, SEQ ID NO:256, SEQ ID NO:257, SEQ ID NO:258, SEQ ID NO:259, SEQ ID NO:260, SEQ ID NO:261, SEQ ID NO:262, SEQ ID NO:263, SEQ ID NO:264, SEQ ID NO:265, SEQ ID NO:266, SEQ ID NO:267, SEQ ID NO:268, SEQ ID NO:269, SEQ ID NO:270, SEQ ID NO:271, SEQ ID NO:272, SEQ ID NO:273, SEQ ID NO:274, SEQ ID NO:275, SEQ ID NO:276, SEQ ID NO:277, SEQ ID NO:278, SEQ ID NO:279, SEQ ID NO:280, SEQ ID NO:281, SEQ ID NO:282, SEQ ID NO:283, SEQ ID NO:284, SEQ ID NO:285, SEQ ID NO:286, SEQ ID NO:287, SEQ ID NO:288, SEQ ID NO:289, SEQ ID NO:290, SEQ ID NO:291, SEQ ID NO:292, SEQ ID NO:293, SEQ ID NO:294, SEQ ID NO:295, SEQ ID NO:296, SEQ ID NO:297, SEQ ID NO:298, SEQ ID NO:299, SEQ ID NO:300, SEQ ID NO:301, SEQ ID NO:302, SEQ ID NO:303, SEQ ID NO:304, SEQ ID NO:305, SEQ ID NO:306, SEQ ID NO:307, SEQ ID NO:308, SEQ ID NO:309, SEQ ID NO:310, SEQ ID NO:311, SEQ ID NO:312, SEQ ID NO:313, SEQ ID NO:314, SEQ ID NO:315, SEQ ID NO:316, SEQ ID NO:317, SEQ ID NO:318, SEQ ID NO:319, SEQ ID NO:320, SEQ ID NO:321, SEQ ID NO:322, SEQ ID NO:323, SEQ ID NO:324, SEQ ID NO:325, SEQ ID NO:326, SEQ ID NO:327, SEQ ID NO:328, SEQ ID NO:329, SEQ ID

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.



## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/12 C12N 10 C07K14/47 C12Q1/68 A61K38/17

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C12N C07K C12Q A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 97 07198 A (GENETICS INSTITUT) 27 February 1997 see the whole document ---	1-8
A	WO 97 04097 A (GENETICS INST) 6 February 1997 ---	1-8
A	ADAMS M D ET AL: "3,400 NEW EXPRESSED SEQUENCE TAGS IDENTIFY DIVERSITY OF TRANSCRIPTS IN HUMAN BRAIN" NATURE GENETICS, vol. 4, no. 3, July 1993, pages 256-267, XP000611495 see the whole document ---	1-8
-/--		



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- \*&\* document member of the same patent family

Date of the actual completion of the international search

3 July 1998

Date of mailing of the international search report

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT, JS 98/06954

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	US 5 536 637 A (JACOBS KENNETH) 16 July 1996 cited in the application see the whole document ---	1-8
A	JACOBS K ET AL: "A NOVEL METHOD FOR ISOLATING EUKARYOTIC CDNA CLONES ENCODING SECRETED PROTEINS" JOURNAL OF CELLULAR BIOCHEMISTRY - SUPPLEMENT, vol. 21A, 10 March 1995, page 19 XP002027246 see abstract ---	1-8
A	WO 90 14432 A (GENETICS INST) 29 November 1990 see the whole document ---	1-8
A	WO 96 17925 A (IMMUNEX CORP) 13 June 1996 see the whole document -----	1-8

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/CS 98/06954

## Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see further information sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see further information sheet, subject 1.

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1. Claims: (1-8) partially

An isolated polynucleotide comprising a nucleotide sequence selected from SEQ ID no.1, consisting of a nucleotide sequence selected from SEQ ID no.1, consisting essentially of a nucleotide sequence selected from SEQ ID no.1; an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence consisting of SEQ ID no.1; an isolated protein encoded by said isolated polynucleotides;

Inventions 2 to 1500. Claims: (1-8) partially

Idem as subject 1 but limited to SEQ ID nos.2 to 1500 respectively clone ID nos. B11 to BV29. (Invention 2 is limited to SEQ ID. no. 2; Invention 3 is limited to SEQ ID no. 3;.....Invention 1500 is limited to SEQ ID no. 1500);

# INTERNATIONAL SEARCH REPORT

International Classification No

PCT, ... 00/01783

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/705

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

MEDLINE, STRAND, EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	MORGAN KEVIN ET AL: "beta3: An additional auxiliary subunit of the voltage-sensitive sodium channel that modulates channel gating with distinct kinetics." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA. FEB. 29, 2000, vol. 97, no. 5, 29 February 2000 (2000-02-29), pages 2308-2313, XP000921060 ISSN: 0027-8424	
X	WO 98 45435 A (GENETICS INST) 15 October 1998 (1998-10-15) SEQ ID NO 876 page 383 -page 384	14,16

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*A\* document member of the same patent family

Date of the actual completion of the international search

13 July 2000

Date of mailing of the international search report

24. 07. 00

Name and mailing address of the ISA

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Authorized officer

Espen, J





## INTERNATIONAL SEARCH REPORT

International Publication No.

Pr. E. /01783

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	LEE N H ET AL: "Comparative expressed-sequence-tag analysis of differential gene expression profiles in PC-12 cells before and after nerve growth factor treatment" EMBL DATABASE ENTRY AA685538, ACCESSION NUMBER AA685538, 10 December 1997 (1997-12-10), XP002142464 sequence	4,14,15
P,X	HIROSAWA M ET AL: "Characterization of cDNA clones selected by the GeneMark analysis from size-fractionated cDNA libraries from human brain." DNA RESEARCH, (1999 OCT 29) 6 (5) 329-36. XP000924951 New_Trembl:Baa86472; Emhum: AB032984 -----	5,10,14, 16,34,35



# INTERNATIONAL SEARCH REPORT

International Publication No

PC . EP 01783

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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